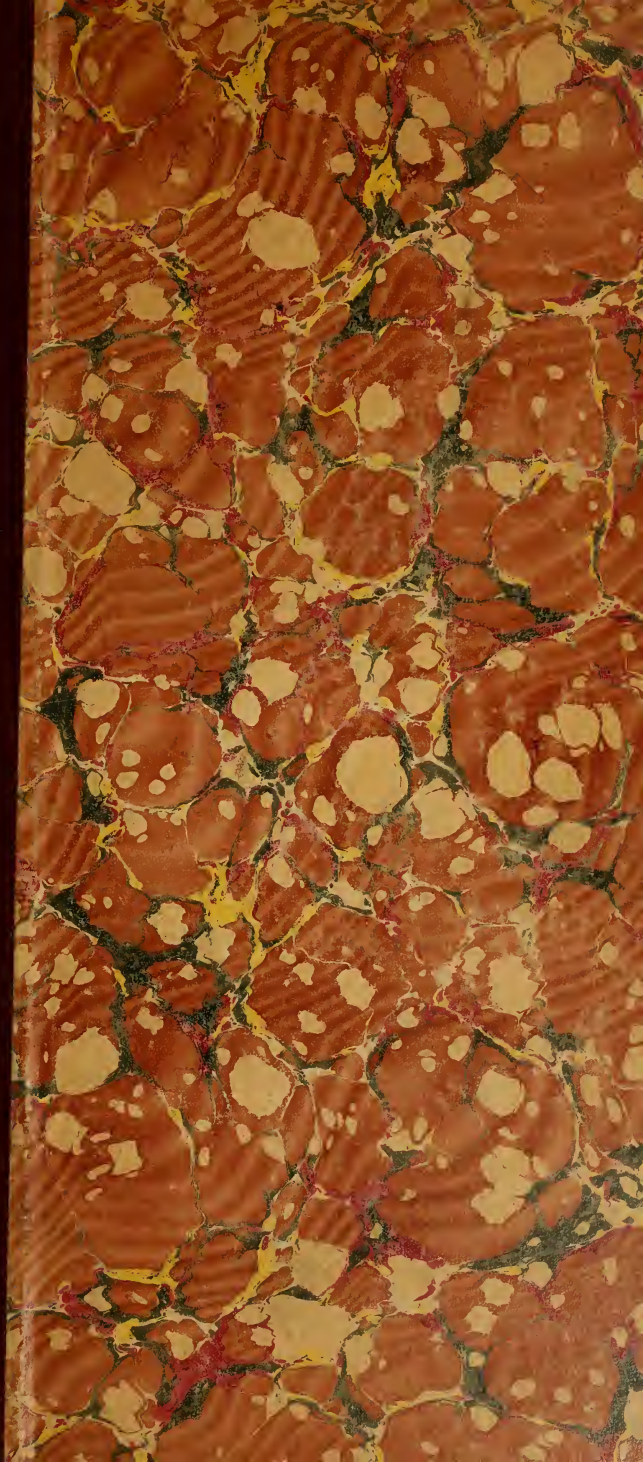
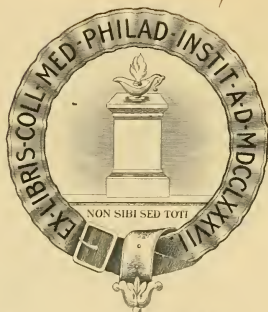




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THE NEW Charlotte Medical Journal

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UNDER NEW MANAGEMENT

VOLUME 82
NUMBER 1

Charlotte, N. C., July, 1920

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Practically every case of syphilis at one stage or another, suffers from the destructive influence of the virus on the corpuscular elements of the blood stream. The plan of treatment of most physicians embraces a blood maker, and the QUICK RESPONSE OF SYPHILITIC CACHEXIA to

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The Charlotte Medical Journal

VOL. LXXXII

CHARLOTTE, N. C., JULY, 1920.

No. 1

Original Communications

MEDICAL LEGISLATION.

President's Annual Address at the Charlotte Meeting of N. C. Medical Association.

C. V. Reynolds, M. D., Asheville, N. C.

Introduction.

In appearing before you this morning as president of the Medical Society of the State of North Carolina, and before reading the message, please let me say that it is with inestimable appreciation that I serve as your presiding officer and the honor is deemed the greater in that it is the highest that the State has to offer.

We trust that you are pleased with the scientific program and just here allow me to express publicly my personal thanks to Dr. L. B. McBrayer for his wise council, and persistent effort in our behalf. It is largely due to him, and the chairmen of the various sections, that we have such an interesting program.

In searching for a subject to present to you, I could find nothing of unusual interest in my profession, so it occurred to me that an economic problem of such vast importance to the medical profession as "Medical Legislation" would be timely, appropriate and, I trust, interesting.

Problem.

Typhoid fever caused 10,113 deaths in 1917. Rate 13.4 per 100,000.

Malaria fever caused 2,387 deaths in 1917. Rate 3.2 per 100,000.

Diphtheria and croup caused 12,453 deaths in 1917. Rate 16.5 per 100,000.

Pneumonia caused 12,821 deaths in 1917. Rate 14.9 per 100,000.

Diarrhea (under 2 years) caused 48,231 deaths in 1917. Rate 64 per 100,000.

Typhoid fever, malaria fever, diphtheria, croup, pneumonia and diarrhea caused 186,005 deaths in 1917.

Tuberculosis caused 110,203 deaths in 1917. Rate 146.4 per 100,000.

Cancer caused 62,429 deaths in 1917. Rate 81.6 per 100,000.

Infants (under 1 year), 171,024—20 per cent of all deaths under 5 years of age.

Total tuberculosis, cancer and infants' deaths in 1917, 342,656.

Injuries at birth—3.2 in 1910—but 4.6 in 1917. Premature births increase 17.5 in 1910 to 21.1 in 1917.

What is the cause? It certainly is food for thought.

There were in hospitals for the insane and blind 55,435 due to syphilis and gonorrhea.

There were 292,519 deaths from diseases for which gonorrhea and syphilis were greatly responsible.

There were 1,068,932 deaths in the registration area in 1917—one-half of which are preventable.

Then may I ask in the beginning—have we a problem?

With this situation before us—with the recent evidence that 35% of our prime manhood physically defective, with the general citizenship of our country enthusiastically crying for a general re-adjustment, do you think for one moment that the real and fundamental secret to the success of human endeavor will, or should be, overlooked?

Medicine, as an applied science, has through individual, rather than a collective effort, made marvelous advances through her various avenues of research; this reward of merit through individual attainment should not be lost.

Then it behooves us for the sake of self preservation, if not for the higher motive, the preservation of humanity, to have a strong committee to watch, plan and outline, for those who are endeavoring to pass Medical Legislation, that we may guide their efforts in the proper way. Never before did we need, as we do now, intelligent leadership.

The Doctor.

The Doctor—"God bless him"—for the people have never paid him, has worked harder, longer, suffered more, endured more, and received less than any other professional man. But this sacrifice has been made in a field of curative medicine—useful, but growing

less important as preventative measures develop.

No words of appreciation can begin to give justifiable praise to the doctor, for his willingness to serve humanity, his forgetfulness of self, and his duty to his family, when facing the rain, the snow, the hail, the wind and the heat—no road too long, no hill too steep, no phobia of contagion too great to prevent his rendering a service to his fellowman. For remuneration?—Yes—But his altruism is, and, I hope, will ever be unquestioned.

Yet, may I ask, have we not neglected our greatest asset to man in awaiting his call for aid and then attempting a cure, rather than anticipating his ills and preventing his calls. We advise how to get well where we should advise how to keep well.

We are constantly discussing our problems, making known our mistakes, as well as our accomplishments; we have forged ahead and have done much, yet we know and the public knows that with our present method we are not by one-half, doing what could be done.

Through various agencies, we can do most effective work in preventing one-half of the present injuries and illnesses. The trend of the public mind (let this mind be in the control of the philanthropist, the socialist, the republican, the democrat, the mugwamp, the braying mule or the politician) is toward some type of socialistic medicine. Our apathy, indifference, or our somnolence toward the passing of Workmen's Compensation laws has caused us, as well as those men whom it was intended to serve, to be led into unsound, unprofitable, and poorly administered medical practices.

Experience has taught us something and we should awaken, ere it is too late, and realize that certain fundamental changes are to be made, and that this is necessary to society, before we are embarrassed by having our duties poorly done by incompetents.

Our already accumulated knowledge, if awakened and put into active service, can reduce sickness and accident one-half. The philanthropists, the politicians and the people at large have this interesting knowledge—made possible for them by us, and given to them by our press. Do you think for one moment that they are going to sit idly by

and see this vast waste of human life?

Our individual problems may cause us to sit idly by, forgetful of, or, with indifference to, the greater problems of the community, the State, or the United States health program and we will suffer the consequences of the inactive, thoughtless, indifferent citizen, and suffer in consequence of our own inactiveness.

The physician is still an individual, and deals with his patient as an individual, failing to recognize that community interest must and should be conserved, even at a loss to the individual for the good of many.

The doctor is not mercenary—neither is he pessimistic—nor would I call him an optimist. He is schooled and trained to think for the preservation of human life, for the betterment of the physical being, realizing that health is the foundation of happiness, prosperity, and independence, and that sickness leads to inefficiency, which produces misery, poverty, degradation, crime and vice.

In colonial days, under pioneer conditions, the first requirements in establishing a village, it matters not how small, was the erection of a church, a school house, and the securing of a physician—those were the recognized essentials for the development and care of the moral, mental and physical well being.

From the small church, the little red school house and the willing physician, there has grown the glorious cathedral, the advanced facilities for educational purposes in our public and private schools, and State universities—the modern physician, fresh from colleges of highest advantages, the experienced surgeon, clinician and bacteriologist.

Vast and wonderful opportunities are most universally offered, yet collectively we have not prospered and made what we should out of our opportunities.

In the war census there was found one-fourth illiterate—an utterly inadequate number of skilled mechanics and technicians, and one-third of our young manhood physically unfit.

Of late we have come to realize many of our shortcomings and is it not high time for us to set about to prevent the preventable, to correct the correctable and to cure the curable?

This is an age of reconstruction, and a readjustment of conditions there will

and must be. This, it seems, is the time, and the tide is growing stronger day by day. As time and tide wait for no man, it behooves us to step in and guide or mold our future before some well meaning philanthropist guides or molds it for us.

There are numerous ways and not many definite plans already proposed, and many more will be forthcoming—none of which will please us all.

Then the first step in the solution of such a vital question is to select a special committee to analyze the various suggestions and pick out the fundamental elements—this committee working in conjunction with a similar committee from the American Medical Association, the Public Health Association, the State Board of Health, and the Southern Medical Association, to report back to this society their conclusions for ratification, the adopting of which should and I believe would bring about a co-operative effort to work for a common objective.

Insurance.

When industries were small and the employer did his daily work with the employee, and was the guiding brain, there was a friendly bond between the two—strife, jealousy and the feeling of the general inequality of it all was forgotten through this relationship.

As industry has grown, machinery has become the guiding brain of the former employer, and the personal equation has disappeared. The employee began to realize that he was an integral part of the industrial machinery, and that to the injured or those suffering from illness, the employer should make reparation just as he did in any damage done to the mechanical devices.

The employer removed from this personal equation did not so consider it. Common law was appealed to by the employee—more justice was not received, so in recent years the barriers protecting the employer were broken down, when the European conception was adopted—replacing the common law system by a law, based “not on fault, but on the fact of injury resulting from accident in the course of employment.”

The method adopted was insurance by many for the benefit of the injured.

There are various forms of insurance adopted; the lodge insurance, fraternal insurance, social insurance, Voluntary, Compulsory Accident and Sickness In-

surance, Mutual Insurance, State Insurance, Workman's Compensation laws, etc., all of which have their advocates and their bitter opponents. This kind of self-preservation on the part of the employer and employee is taking on vast proportions in this country, and it means a new conception of law and order regarding the proper placing of the responsibility of the ill and injured. This new social and economic condition that is upon us, and growing in vast proportions daily, is of serious moment, especially to the medical profession. The present lodge and contract practice has received a well deserved censure from us, and has merited a greater condemnation than it has received at our hands.

The form of insurance in about one-half of the large countries in Europe is compulsory sickness insurance, adopted in Germany in 1884, Austria, 1887, Report A. M. A. Hungary, 1891, Norway, 1894, Finland, 1895, G. B. 1907, Italy and France, 1898, Spain, 1900.

United States for federal employees only, 1908. About 26 States of the American Union, 1911-1913.

Arguments.

For insurance:

“Real or imaginary conditions in the United States have caused many welfare and social reformers to organize the American Association for Health Insurance evolved from this association as the best method for social betterment.”

Against this it is argued that “social evils do exist and some remedy or remedies should be sought, but while organized labor, the employer and the employed and the physician are opposed and the ones most vitally interested are opposed to compulsory health insurance. Why is it best?”

It is claimed that “practically every one who has considered the matter, recognizes that the distribution of the loss from sickness by means of insurance is desirable.”

The opposition claim: “No new health insurance legislation should be enacted before we entirely rectify the unfairness of the present compensation law.”

Those favoring insurance state that “compulsory insurance is necessary because under voluntary insurance those who need it most, are the ones who remain uninsured (lack of funds).”

Against this: “The present system whereby the poor are treated by the most efficient medical men is far better

than medical service furnished by physicians which health insurance obtains."

It is argued that "compulsory insurance will stimulate the needed campaign for the prevention of illness."

The negative side of the question say: "Untrue—the State being already taxed through sickness insurance fund would not be available."

Again: "Life expectancy increases in G. between the ages of 18 and 60 (12 years)."

"M. M. Dawson says that this is not true—the increase was only 1.6 years. Have non-insured countries a better showing?"

For insurance it is further stated that it will "reduce the time lost by the wage earner."

"This assertion contradicted by experience. Germany and Austria 6-19 to 9-19, increase A-16.4 increase."

"Malingering would be negligible in compulsory insurance."

As against this: "In G. malingering and pension hysteria has become a regular epidemic."

Those for insurance claim: "Disease causes poverty."

Those against: "Poverty cause of disease."

The A. M. A. committee states that: "Insurance will solace the abuse of medical charity. Individual will receive less, but the physician as a whole will receive more per capita."

Those opposed claim that it "will extend medical charity abuse—unemployed casually employed. Self employed—poorly paid in insurance act."

Those opposed that it will "decrease medical efficiency. Destroys incentive for medical research and individual effort. Competent and incompetent get same pay. Destroys personal relationship between patient and M. D."

To lessen human waste through preventable accidents, occupational disease, in fact, every preventable that will prevent, is an economical essential to material business, as it is to the human agents that guide it.

Notwithstanding the various pros and cons—we have under the old scheme 38,000,000 employed in the United States and of these 1,385,856 are ill at any given time—estimating nine days individual loss, gives a grand total of 12,022,104 sick days in the year.

Now one half of these illnesses are preventable. To say nothing of the

greater and accumulative loss due to a lessened future earning power on account of illness and the sequel of such illnesses. Is it not an economic waste to allow it to proceed?

The monetary loss, and the number of sick are important factors and the State—the employer and the employees are beginning to consider them as serious problems to be reckoned with. They now realize that the length of illness and the amount of medical aid is not the object sought—but rather the complete restoration of the individual to useful citizenship, which elevates the common standard of American physical fitness. Adequate care, not based on time or money, will be, and should be, insisted upon.

Anything and everything that tends towards raising the general health standards through preventive or curative measures should deserve serious consideration, but our ambition to better conditions should not force anything upon us hastily. Wise and judicious council should be sought, prompt action should be taken, lest we inherit the avoidable mistake of others.

The insurance acts in the foreign countries and in this country are most ambitious in an effort to raise the physical standard of a certain class of laborers—an immense piece of P. H. legislation, based upon certain principles of democracy for the benefit of all the people, acceptable by the people (and for the best interest of the people, the State, the employer and the employee, each realizing their relative responsibility, will pay a percentage of the cost, thus distributing the expense.

Under insurance, the annual death rates have been lower in infancy, and between the ages of 5 to 19. Between the ages of 20 to 39 not steady—17.7 to 16. Between the ages of 40 to 59 there is a decided increase, 17.6 to 20.8.

If the insurance act will lessen morbidity, mortality and poverty, it will increase health, happiness, efficiency and prosperity of the insured. Then by all means, let's have it, but we must remember that the fundamental factor lies in the intelligence and the integrity of the medical profession, and its ability to administer intelligently, adequately and honestly.

There are many objectionable and serious handicaps to the successful administration of health insurance as handled

in the old country, such as lowering the standard of the medical profession—the lack of individual inspiration to excel, lack of remuneration for services rendered, etc. All of these evils should and must be remedied before health insurance is endorsed by the medical profession. It is your duty and my duty to guide any legislation, either State or National, that is of such vital importance to the people.

State Medicine.

The greatest asset in any State lies in the efficiency of the moral, mental and physical development of her womanhood and manhood.

It is my opinion that health is the basic element of human efficiency and upon it stands or falls the power or perfectedness of the State or Nation. The State is constantly and without objection, looking after and controlling her inferior assets, why then is it not to her greater advantage to seek to raise the standard of, and to aid in protecting her greatest asset, the human family?

There is not a voice raised against the State's efforts towards the prevention of disease, but there has not been a sufficient effort on the part of the physician in the prevention of disease, nor in their effort to aid the State in securing sufficient funds to advance the work, nor pay adequate salaries to the doctors for services rendered. When, through the activities of the State Health Board, there are found to be curables, uncured, operatables unoperated upon, defects unremedied, focal infections still infecting—it is high time for some agency to be set in motion to correct this existing block in her progress.

Again, nothing is said when these curables or operatables are among the indigent—the poorest human asset the State possesses, but a storm of indignation is immediately raised when the State begins to protect her greatest asset, the better element of society.

Illness, injury and deformity, the great factors in inefficiency, suffering, sorrow, poverty, vice and crime are not limited entirely to the indigent, but occur throughout the entire population.

The surgeon, the internist, the pediatrician, the dentist, etc., have had the indigent, the ne'er-do-well and the well to do under their professional care and guidance for years, and those who sought advice have received much, but by a different scheme of things. We

must be willing to admit that a great deal more could be accomplished and that through omission rather than commission, we have rendered a less efficient service. Some form of reformation will and should be made, and the present scheme of not differentiating between classes is the best, until we, as medical men, offer a better one and one which will accomplish as much, if not more, good.

The State can handle its charity, assume the entire expense and accomplish much good among her lowest type of citizenship.

The State, by not differentiating, can reach her greater asset and charge a sufficient sum to save her harmless as to expense, and gain much more by restoring to health a higher type of citizenship.

Health work is a stupendous problem and upon its continued reformation, depends the preparedness of everything that lives, and the perfectedness of everything material.

The value of the physicians' superior knowledge in formulating plans, is essential to its development, as well as to its success or failure. Then it is a serious question that is confronting us and it behooves us, in fact it is of paramount importance that we should properly estimate its value—realizing that it is to our collective as well as our individual advantage to give it careful consideration. By so doing we will save the dignity of our profession, and not be at the mercy of some poorly prepared political scheme.

The Crimean war, the Civil, the Spanish American war, all stand out with sad histories of having lost more men from bacterial diseases than from enemies' bullets. Contrast this with our present method of prevention of disease, and we are doubly proud of our late victories in that we conquered the German and controlled disease. (Controlled the pest and the parasite at one great blow.)

The preventative measures that have passed the experimental stage, and that have proven beyond all question their value, were legally enforced in the army. If these measures are so imperative and essential in the army, why—may I ask, are they not alike imperative in civil life?

It has been my pleasure to see compulsory vaccination against variola for the past ten years in school children, and

it is indeed gratifying to note the father, who escaped vaccination, come down with the disease; children, directly exposed, escape infection, and again it is gratifying to see those vaccinated against typhoid fever escape, and the stubborn member of the same household fall ill, thus proving the efficacy of the immunization. Again, it was a very pleasing experience during this year's epidemic of influenza to have a school of boys—140 in number—with not a single case of pneumonia. Contrast this with the same school unvaccinated the year previous, with 50 cases of influenza, 5 severe cases of pneumonia. A school of girls—130 in number—same prevention—not a single case of pneumonia.

I am sure such instances could be multiplied by us all, yet at the present time immunization is a voluntary proposition and the general practitioner has not immunized his people, nor has he made a strenuous effort. The State should be empowered, through legislation, to enforce such highly efficacious measures.

The public health problem is to the casual observer an intangible proposition, and it may yet be some time before the legislators realize its full importance, and appreciate the fact that man is its greatest asset when his moral, mental and physical well being is conserved—and its greatest liability when these essentials are neglected.

Surely the cow, the sheep, the hog are tangible assets, and the loss of one is felt by the owner, and affects directly his pocket book. But man has been made the legislative goat until his efficiency has been so lessened that it has become retro-active, to the extent that the entire man power has awakened a new era demanding self-preservation, and thereby proclaiming man's efficiency superior to that of the beasts.

Public health work is the prevention of disease, the preservation of health, the prolongation of life, the lessening of morbidity, the lowering of mortality—through its laboratories, its field workers, its statisticians—has shown through this method of education that a high standard of health can be obtained. It has also been shown that its conservation has been sorely neglected.

Subjects for immunization have remained unimmunized.

Curables have remained uncured.

Operatables have remained unoperated upon.

To relieve this situation, let the physician wake up to his individual responsibility and see to it that his clientele comes up to a high standard of physical fitness. Should the State, through its laboratories, its field workers, its statisticians, ascertain that a member of a physician's clientele has been neglected—in that event the State should, and it becomes its duty, to enter in and protect its defectives.

Any one of the State's agents should make every effort to relieve the defective through the parent, guardian and family.

A monthly report should be made to the county medical society, which should in turn endeavor to meet the situation. This failing, the State should take prompt measures for the relief of the sufferer.

There is a clear and distinct duty the State owes to its citizens who are in need of and have not received medical or surgical treatment. This relief should be given by the best qualified medical and surgical men, who should receive adequate remuneration for services rendered. This service should be financed through taxation and with disregard to class distinction.

Where the individual physician fails to respond to his greater duty to the community at large, his individual and personal relationship as a family advisor should become a matter for collective action by the community physicians; otherwise, this situation should be improved through the State.

In conclusion, I would suggest for your attention the advisability:

First—The appointing a special committee to prepare a plan for a public health administration.

Second—The committee shall have the power to associate with itself experts who are interested in and are well versed in the facts which are fundamental to the success or failure of such a plan.

Third—That this committee should act in conjunction with the American Public Health Association, the State Board of Health, the Public Health Association, the Southern Medical Association.

Fourth—That this committee submit a plan of organization—outline its ad-

ministration, and pay especial attention to health supervision and treatment of school children—the handling of the unimmunized—the curing of the curables—the operating upon the operatables, etc.

Fifth—This committee to serve without remuneration, but their actual expenses incurred shall be paid by this society.

Summary.

Finally, I would like to quote from the report of the Special Committee of the A. M. A. for 1919, Social Insurance, Pamphlet XI—

“The responsibility is threefold: communal, industrial and individual. But the burden today is almost entirely individual. The community has accepted part of its liability and endeavored, by sanitation, preventive medicine and hospitalization, to improve the situation. Industry has, until now, evaded its entire responsibility and liability. The individual still bears the brunt of the burden and the cost of sickness as a personal calamity. The community and industry have begun to realize and accept their share of the liability. We have, in the past received from southern and southeastern Europe, enormous numbers of hardy, vigorous laborers and industrial workers. We have used them lavishly, and their labor extravagantly. We have neither wisely harbored their energy nor salvaged the damaged. We have recklessly used this labor as if the supply were unlimited. We have indeed treated it, as we dealt with our forests and our mines. We have been mining out our labor and burning it up. Now the war is over, hundreds of thousands of these people are returning to their former homes, not to return here. This country is facing a scarcity of labor, and must care for it and salvage it, when injured, as never before.

The remedy for this situation lies economically in a redistribution of costs, not of adding new costs, but rearranging the present method of expending the costs already being expended. Large numbers of wage-earners, probably a majority of them, now spend each week enough money on funeral insurance, that they may be sure of a decent burial, which would equal or more than equal their share of any just sickness insurance scheme to give them sick benefits, maternity, and adequate medical care,

and a hundred dollar funeral benefit. Improved medical care must come from more co-operative and less purely individualistic care from the medical profession. Free choice of physician by patient, and present relation of patient to physician and just and assured remuneration for work done by the physicians can easily be assured to the physicians under an insurance plan.

Preventive and curative medicine can equally be more fully developed with free play for individual development of physicians. The alternatives offered by the funeral insurance companies are a further development of preventive medicine, State care of the sick by salaried physicians and leaving the profits of funeral insurance undisturbed.

There is a tremendous problem before us, and we, as medical men, realize its vast proportions; it does not take a spectacular epidemic of infantile paralysis, nor the two recent outbreaks of influenza, to make us appreciate the vast waste of human endeavor, due to the constant but less spectacular diseases.

The laity are accustomed to and accept as a natural law of nature the usual number of deaths, one-half of which are preventable. We have trusted too much to personal liberty; to the idea that self preservation is the first law of nature. In prevention, it has been my experience that self preservation is the last law of nature.

We inherit, through our profession, the distinction of being the guardians of the health of our people, and, it is our duty, and should be our privilege, to safeguard it.

It may not be through insurance, it may not be through State Medicine; it must be a remedial measure that will reach all the people all the time.

This remedy should and must come from the medical profession.

Squamous syphilide, generally known as the palmar or plantar syphilide, is frequently very difficult to differentiate from psoriasis and eczema. In psoriasis the presence of other lesions is essential to make a correct diagnosis. Fortunately these are practically always in evidence, for psoriasis does not occur in these locations alone. Eczema is almost bilateral, and usually itches, especially after washing, but it should be remembered that a syphilitic lesion may become eczematous.

DIARRHEAL DISEASES IN CHILDREN.*

By Frank Howard Richardson, M. D.,

Assistant Pediatricist and Chief of Children's Clinic, Brooklyn Hospital, Brooklyn, N. Y.; and Black Mountain, N. C.

The subject assigned me, Diarrheas in Children, is one that has been the despair of the medical profession for centuries. Even in recent years, when so many of the old problems have been yielding their mysteries to the men of science, this particular plague has seemed to offer no hope of solution. Of very recent years, however, a mass of work has been done, in widely separated parts of the world, by clinician, laboratory worker, by sociologist, and by philanthropic laymen; so that it would seem as if at this moment we were standing on the threshold of a new day, the veritable dawn of a tomorrow, after this dense night of helplessness and ignorance.

Unfortunately, I have no panacea to present to you, for the cure of all diarrheas. I shall later only outline what I believe to be a rational handling of the different varieties,—but as to anything new or startling in the way of a specific therapy, I am the bearer of no good news. However, in our textbooks we have other headings than that of treatment,—Etiology, Diagnosis, and Prophylaxis are quite as important. And so tonight I would like you to consider with me,—first, what we know about the Etiology; next, what we know about the Diagnosis, and next, what we know about the treatment of Diarrheas of Children. Lastly, and most important and hopeful of all, will be the consideration of what we know about the Prophylaxis of this Scourge of the First Year of Childhood.

Our old classification of the Diarrheas,—some modification of which was taught each one of us here, in his medical college days, I suppose,—was a mixed one, based upon pathology, symptomatology, etiology, and description. For instance, we were familiar with the terms Gastritis, Enteritis, Gastroenteritis, Gastroenterocolitis, Enterocolitis, Ileocolitis, Colitis,—familiar, I say, with these terms, but not, I am quite confi-

dent, able to diagnosticate the location of the pathological lesion, with the definiteness that this glib classification would suggest. Not only were we unable to do this in the living baby, but even at the autopsy table there was a most discouraging failure to find the proper lesion,—or, often enough, any lesion at all! This classification, of course, was simply an effort of the universal desire, springing up with the renaissance of interest in the findings of the dead house, that had its origin in Vienna in the days of Rokitsansky and his disciple, Widerhofer. The terms melaena (black or bloody diarrhoea), dyspepsia (failure of digestion), enteralgia (pain in the intestine), dysentery (failure of function of the intestine), cholera infantum (cholera-like disease of infants), atrophy (non-nourishment), malnutrition (poor nourishment), marasmus (wasting), inanition (non-nourishment)—all of these, familiar to us from our textbook days, are attempts to describe or name clinical entities by some real or fancied symptom accompanying different forms, or stages, of the Diarrheas. Theodor Escherich, of Vienna, gave us a conception of infant digestion and infants' stools, from the bacteriological viewpoint. Neglected for a while, we are now hearing more and more of that fascinating subject, the intestinal flora, which we are realizing can be altered at will according to the character of the food administered. This, as will be seen later, has been made use of in one of the most important branches of the therapy of the diarrheas today,—namely, that of the feeding of the baby according to the character of the alvine discharges. The whole question of carbohydrate fermentation, and protein decomposition or putrefaction, is bound up with this classification, which we shall shortly consider more in detail, under both etiology and treatment. (Hill. *Devel. of Mod. Inf. Fdg.*, Boston Med. and Surg. Jour., 25, Mar. 20.)

Czerney, of Breslau, is responsible for an etiological classification which, for the first time in the history of the work on the diarrheas, recognizes that there is not such a deep, impassable gulf between the sick child and the potentially sick child, after all; and he also brings out for the first time the conception that perfectly good food, improperly adapted to the baby's use, may be the cause of some of the most serious and severe

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of the diarrheas of infancy. He recognizes as causes: 1. Food: Under which we need consider only (a) Fat Injury; and (b) Starch Injury. 2. Constitution: Under which head he considered such causes as (a) Heat; (b) Lowered resistance from previous illness, etc. 3. Infections: Under which he considered (a) Food spoiled before its entry into the body; (b) Food spoiled after it has entered the body,—i. e., in the intestine; and (c) Infection of the intestinal wall itself by specific bacteria, such as dysentery, cholera, etc. All of this he prefers to group under the heading, "Disturbances of Nutrition," rather than limit his consideration, as previous men had done, to "Gastrointestinal Diseases."

It remained for Finkelstein, of Berlin, to build up for us a series of truly clinical pictures of four "states of nutrition," if you will. Two of these, while not entirely diarrheal in character, nevertheless cannot be left out in a consideration of our subject. He describes each of these states, attempts to search out its etiology, and seeks to construct a rational therapy, it is true; but his chief emphasis rests upon the clinical picture. On this Finkelstein rests his case. The weight curve here assumes great diagnostic importance.

1. Disturbed Balance,—or Failure to Gain. (Really not a diarrhea at all, in fact, a constipathene; but included for the sake of completeness.) From too much fat, and too little carbohydrate. Dry, constipated "soap stool," and stationary weight.

2. Dyspepsia,—or Mild Form of Fermentative Diarrhea (of Sugar),—or Mild Summer Complaint, Gastroenteritis, or what you will. A mild diarrhea with green, sour, watery stools, and occasional vomiting. From too much sugar and salts.

3. Intoxication, or Grave Form of Fermentative Diarrhea (of Sugar) Severe Ileo-Colitis, or Cholera Infantum. (Finkelstein's "Alimentary Intox-

ication.") A terrific diarrhea, but, far more important than this one symptom, a general condition of extreme gravity, characterized by high temperature, rapid thready pulse, hyperpnea of the accompanying acidosis, stuporous apathy, sunken fontanelle, dehydrated musculature and subcutaneous tissue, and general picture of collapse with the promise of speedy demise. From improper treatment of 2, above. Withdrawal of food improves this condition. Feeding of even moderate amounts of food produces collapse, sometimes followed by speedy death. (Finkelstein's Paradoxical Reaction.)

4. Dekomposition,—or Athrepsia, Marasmus, Infantile Atrophy, Malnutrition, Inanition. The ravenous, monkey-like, little old man of a baby,—a caricature to produce laughter, were it not a tragedy to force tears. A description of this condition would be a waste of time, so well known is it to the veriest layman. Vomiting, constipation, or diarrhea accompanies it. From improper treatment of 1 or 2 or 3, above. Withdrawal of food here, or Hunger or Starvation Period, for even a few hours, may cause death. (Exactly opposite Food Reaction to that noted under Intoxication.)

Hill says: "Finkelstein's chief contributions may be summed up in four phrases: sugar, salts, clinical classification, and protein milk. Gerstley says that we owe Finkelstein for "this beautiful new clinical classification"; for "introducing into the study of disease a new food factor" (i. e., sugar; and he might have added whey, or salts, contributed by his assistant, Ludwig F. Meyer); and "the grouping of these four types under the head of 'disturbances of nutrition,'"—i. e., that "every function of the body is involved and affected,—under no circumstances must we think of the gastro-intestinal tract alone." Hence, "stool examination is absolutely incidental to the examination of the entire baby."

The most satisfactory classification of the diarrheas down to date that I have found, is one set forth by Lewis Webb Hill of Boston. (Et. and Tr. of the Diarrheal Dis. of Infancy. J. A. M. A., 7 June 19, p. 1653.) He says: "Any diarrhea is caused by increased intestinal peristalsis. This increased peristalsis is caused by some irritation acting on the intestinal mucous membrane, and it is best to classify diarrheal conditions according to the type of irritant that is causing the trouble." His is an etiological classification as follows:

1. Mechanical Diarrheas, due to mechanical irritation.

2. Fermentative Diarrheas due to chemical irritation (commonest).

Under 2, he includes:

(1) Fermentation of Sugar, viz., (a) Overfeeding with sugar; (b) Parenteral; (c) Overheating (excitement); (d) Nervous exhaustion; and (e) Constitution.

(2) Putrefaction of Protein: (a) Carbohydrate fermentation quickens peristalsis, causing acid, sour-smelling, greenish, watery, diarrheal stools, that redden and excoriate the buttocks; (b) Protein putrefaction slows peristalsis, causing alkaline, foul-smelling, brownish, hard, constipated stools.

3. Infectious Diarrheas, due to bacterial irritation. Bacteria actually invade mm.

Under 3 he includes:

(a) Gas Bacillus, thriving best on carbohydrate food.

(b) Dysentery Bacillus (commonest), or Streptococcus (more rarely), thriving best on proteid food.

He gives a most rational, straightforward technique for handling the various varieties, based on their etiology and their chemistry and their bacteriology. You will find this set forth in his article in the J. A. M. A., and also in a book that he has published in connection with Jesse Robert Gerstley, of Chicago.

Passing on to the treatment of the different varieties, using this last skeleton as a basis, we may first take up one or two forms in a different order from that in which Hill considers them. First, there is the diarrhea occurring in the normal breast fed infant, discussed by Marfan in *Le Nourrisson* for Jan., 1920, p. 1, "Diarrhea in Breastfed Infants." We mention this simply to urge that a frequency of stools in the breastfed, if

unaccompanied by other symptoms, in a child that is gaining and is happy, and apparently well, be left severely alone. This should not be considered a diarrhea, no matter what the mother calls it.

A simple frequency of stools in the case of artificially fed baby calls for the diminution or the complete elimination of the sugar from the formula, the increase of the proportion of the water to the milk, and the boiling of the mixture before feeding it to the child. (Jos. Brennemann, "Boiled vs. Raw Milk." J. A. M. A. 60; 575, Feb., 1913; Arch. Ped. 34:81, 1917.) This dilutes fat, sugar, salts, and protein, and renders the protein more easily and readily digestible. (R. Dennett, *Simplified Infant Feeding*, Lippincott, Phila.) If hot weather occurs suddenly, all of these measures, plus a reduction to the minimum of heat-retaining clothing, including the ubiquitous "belly band," may be most valuable prophylaxis.

For Parental Infections, treat the causative coryza, otitis, etc., if you will, but do nothing for the diarrhea, except as suggested in the previous paragraph, —which, by the way, is pretty good practice for any form of diarrhea, in addition to whatever other specific measures may be advocated in a given case.

All of these, Hill classes under his Fermentative Diarrheas, for reasons which he does not make altogether clear. I have preferred to take them up before we reached the other headings, without attempting to assign the cause to any particular agency.

Starvation diarrhea also belongs here. Its treatment is indicated sufficiently by its name.

The so-called Mechanical Diarrhea, due to some irritating food substance such as raw fruit, Hill would treat by giving the proverbial "good dose of castor oil." Those of you who heard Dr. D. Lesesne Smith, of Saluda, at the Charlotte meeting last April (Transactions of the N. C. State Med. Soc., 1920) will recall his note of exultation that there is at last dawning a new day, in which castor oil and calomel shall no longer be regarded as the all-healing, absolutely harmless medicaments that we once thought them. Abt and Jampolis, of Chicago, have demonstrated that the ordinary dose of either of these drugs caused blood to appear in the

stools, in tiny amounts. Personally, I want to be "shown," before any baby for whose health I am responsible gets a "good" dose of castor oil, whatever that may mean, or of any other drug, for that matter. Diluted boiled milk diet, plenty of cooled boiled water, and rest, will generally be quite sufficient to allow the baby suffering from this form of diarrhea to recover, as soon as nature's catharsis has rid him of the offending substance. The diète hydrique of Marfan (Le Nourisson, Sept., 1919, "Restricting an Infant to Water," p. 257), accomplishes this perfectly.

Under the heading, Fermentative Diarrheas, we must first make our diagnosis, i. e., decide whether we are dealing with true sugar fermentation or protein putrefaction. Here our stool differentiation will help us. To determine the reaction of the stool, whether acid or alkaline, a fresh specimen of feces may be obtained, by introducing the fenestrated end of this glass tube into the baby's rectum.

The treatment of the forms of Sugar Fermentation falls into two headings, the Mild and the Severe, corresponding to Finkelstein's 2nd picture, Dyspepsia, and his 3rd, Alimentary Intoxication.

Mild Form of Sugar Fermentation—(Dyspepsia).

1. No cathartics! No astringents! No opiates!

2. Hunger for from 12 to 24 hours.

3. Abundance of water, bicarbonate of soda, or, if you like a smack of the German tea.

4. Then food: At first $1\frac{1}{3}$ milk, $2\frac{1}{3}$ water, boiled.

Very gradually, increase milk and decrease water, to normal.

Very gradually add sugar in form of maltose-dextrin.

Severe Form of Sugar Fermentation—Cholera Infantum, or Colitis. (Alimentary; Alimentary Intoxication.)

1. No cathartics. No astringents. No opiates (except for definite indication).

2. Hunger for 24 hours. (Finkelstein's Paradoxical Reaction.)

3. Water, Bicarb., or Saline.

4. Treat Acidosis, if present.

5. If Marasmus (Dekomposition) results, treat that, Marriott's Treatment with Corn Syrup and Lactic Acid Milk may be used.

6. Stimulation, if necessary.

7. Then Food: (1) Breast milk; (2) one-third milk and two-thirds water, boiled; (3) albumin milk, of protein milk (F's EiWeiss Milch); (4) skim milk with Powdered Caseinate (Proprietary Laro San), may add 3, 5, 7 or 9 per cent sugar; (5) lactic acid milk or butter milk (Lactone or Bulgara Tablets). Tiny amounts. Increase these very gradually and guardedly.

Mild or Severe Form of Protein Putrefaction:

1. Same as above, except for diet.

2. Food: (1) Breast milk, because high in sugar, and because it is breast milk; (2) Diluted skim milk, boiled; (3) Sugar solutions, any form desired; (4) Cereal gruels; (5) Lactic acid milk, or buttermilk.

Infectious Diarrheas:

Our diagnosis here is made on the following points:

1. History: Onset—sudden.

Previous feeding history—good.

Prostration—Severe. Baby is very sick, with severe prostration, meningismus, moderate or high temperature.

3. Stools: Number—Many; as high as thirty.

Size—Small.

Character—Blood, pus, mucus, little or no feces. (Like Intussusception.)

4. Reaction period: Uninfluenced by feeding.

Treatment. Same as with intoxication, except for feeding. To determine how to feed, you must first diagnose as between (a) Gas Bacillus, on the one hand; (b) Dysentery (by far the commonest), and streptococcus on the other.

To do this, get a sterile specimen of the stool, by means of the tube mentioned above. Then proceed in either of these two ways:

(1) Put this into a little milk in a test tube. Heat to 180 degrees, for 1-2 hour, to kill all bacteria except gas spores. Incubate at body temperature for 24 hours. If Gas Bacilli: Milk is coagulated; smells like spoiled butter; shot full of holes.

(2) Put stool in test tube, add a little Dextri Maltose, and 15cc water. Boil, then pour into fermentation tube. Incubate 24 hours.

If gas bacilli, gas in top of tube, or blows out tube.

If (a), food as in case of Sugar Fermentation, with (1) Breast Milk, (2) 1-3 Milk and 2-3 Water, or (3) Albumin Milk, (4) Larosan, (5) Lactic Acid Milk. (Boiled.)

If (b), feed as in case of Protein Putrefaction, with (1) Breast Milk, (2) 1-3 Skim Milk and 2-3 Water, (3) Sugar Solutions, (4) Cereal Gruels, or (5) Lactic Acid Milk.

Warning: Watch out for other conditions which may be causing the diarrhea, such as typhoid, intussusception, acidosis, TB. D., etc. In other words, do not start out with the preconceived notion that you are dealing with a diarrhea per se, and nothing else. Keep thinking of other possibilities always.

Jesse R. Gerstley (whose book, gotten out jointly with Hill, I should urge you all as loyal North Carolinians and as progressive physicians, to read and study with the utmost care and attention), (Clinical Lectures on Infant Feeding Saunders, 1917.) did a great service to some of us who have wondered how it was that different parts of the country, or of the educated world, for that matter, should differ so widely according to locality, about some things that seem capable of no lines of locale. Why, for instance, should Boston and Chicago differ so markedly in their treatment, say, of the infectious diarrheas? Why, again, should they have differed so widely in their interpretation of that old pediatric bone of contention, the curd in the baby's stool that one insisted was protein, and the other swore was fat? Gerstley answers this by pointing to the "customs of the country," if you will, as regards both the medical and the lay estimation of the advantages and disadvantages of boiled and raw milks. In the East, until comparatively recently, raw milk was the rule, rather than the exception, while in the West, and on the continent of Europe, boiled milk has been the accepted thing. Hence, when the East and West differed over the treatment of the severe diarrheas, for instance, East was discussing, for the greater part, diarrheas of infectious origin; while West, and Continental Europe, are dealing with diarrheas due to nutritional disturbance. What your custom here is, I have not yet learned, perhaps, as is the case in my own city, there is no overwhelmingly prevailing custom in

this regard, but let me strongly urge you to join in a crusade for the universal boiling of milk all over the State, perhaps the cheapest, most easily procurable sanitary measure attainable. The universal adoption of such a custom would, I think I am not going too far in saying, rob the summer of a great share of its terrors for the parents who dwell in the mountains, the Piedmont, and the coastal plain alike. By this one measure we could at once eliminate the whole punal of infectious diarrheas. In a Commonwealth which has accomplished such remarkable feats along all sorts of medical lines as this has,—inaugurated wholesale free tonsil and adenoid clinics; constituted a travelling Post Graduate Medical School with furnished and administered free anti-typhoid inoculations, while teaching clinics; put itself in a dozen other ways in the forefront along public health and health educational lines—surely in such a community as this has shown itself to be, the united medical profession could quickly bring to the mass of the people a realization that they hold in their own hands the possibility of eliminating the infectious diarrheas,—dysentery, colitis, cholera infantum,—call them what you will. And that it is to be obtained by such a simple, elementary procedure as the boiling of all milk, from whatsoever source, that is to be used for feeding of infants and young children.

I think it is only fair to state, however, in this connection, that there is another prophylactic measure that should be even easier to bring about universally, if we were to set our minds to it. And this measure, universally adopted, would eliminate not only all the infectious diarrheas of infancy, but as well all the nutritional diarrheas that are of any import whatsoever. You have all anticipated what I am going to say, of course,—for, as I told you at the beginning of this talk, I bring you no new tidings about the treatment or prevention of diarrheas,—I am only reviewing facts well known to all of you. The complete re-establishments of breast-feeding, in the minds of the people, to its former and rightful place as the best, nay, as the only safe alimentation for the young of the human species, in all cases, is the one measure which promises complete immunity, not only from the infectious, but as well from the nutritional diarrheas of infancy,

which together furnish us our fulminant cases of colitis, or cholera infantum,—many of which, we all admit it with bowed heads, die in spite of all we can do for them, and will probably continue to do so, to the end of the chapter.

I shall spare those of you who were indulgent enough to listen to me at our annual meeting in Charlotte last April, (Transactions of the N. C. Med. Soc., 1920. Simplified Infant Feeding.) a repetition of the arguments for universal breast-feeding, that I presented then. Suffice it to say that there is growing a profound belief on the part of many, many authorities, that close upon 100% of our babies could be reared upon the breast, and kept there until the ninth or tenth month, as desired, were we to be given three prerequisites. (a) A universal belief on the part of the laity and the profession alike that breast-feeding is the best feeding, and that it is practically universally procurable. (b) A knowledge universal on the part of the medical profession of the prime importance of treating well babies to keep them well, and a willingness to undertake such work, rather than waiting for them to become ill before considering them subjects for the doctor. If the doctors become imbued with this idea, the public will follow willingly,—I can testify to this from my own experience in building up a practice composed of far more well babies and children than of sick. (c) An ability on our part to keep practically 100% of our babies on the breast,—an ability compounded of a knowledge of the physiology of the mother's breast; of the psychology of the mother's mind; and of the rational technique of complementary, or auxiliary, feeding, to tide over the occasional vagaries of that most intangible and temperamental of all the bodily functions, maternal lactation.

Let me quote at a little length from an authority of note. Holt says; speaking of the summer diarrheas of infancy: Artificial feeding is an etiological factor of the first importance. Less than five per cent of the severe cases of diarrhea are among the breast-fed, and fatal cases among the exclusively breast fed are really rare, no matter how bad the surroundings or how ignorant the mothers. (Italics ours). Breast feed-

ing requires but little experience, and may be successfully done even by those with a very low grade of intelligence and among the poor; but artificial feeding is not successful unless done with much intelligence and experience, and with good milk.

We must never forget that, as compared with cow's milk of the very best sort, breast milk suffers, (a) no bacterial contamination; (b) no cooling and subsequent reheating; (c) no handling; (d) no time lapse between production and utilization.

A perfect treatment or a sure cure for the diarrheas of childhood may never be ours to apply. Their prevention, however, lies ready to our hands.

(Discussed by Drs. Roberson, Taylor, Bowers, Fox, Gray, Johnson, and Hanes.)

INFANTILE DIARRHEA:

(Observation in its Management.)

By

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The commonest and most troublesome disorder of infancy is probably diarrhea in its varied manifestations. Especially true is this during the first year of life, and as relates the seasons, during summer. In spite of the great amount of work done, and experiences published there is yet no set conclusions as regards a thorough understanding of etiology, danger to the community, economical loss, and prophylactic measures that should prevail in our endeavor to control this far-reaching problem.

Apart from the purely scientific interest it is apparent that the condition deserves most serious consideration and active management with the hope that diminution of the number of cases and deaths resulting from this condition. Figures and statistics compiled and published by various observers the country over all point to the unusually large number of cases of this type. A review of the cases falling under this head gathered from the statistics of the Charity Hospital for the six years ending December 31, 1919 are here shown:

	Cases During First Year	Deaths	Cases During Second Year	Deaths	Cases During Third Year	Deaths	Cases After Third Year	Deaths	Total Cases	Total Deaths
1914.										
Gastro-Enteritis -----	7	5	5	0	2	0	3	0	17	5
Enterocolitis -----	38	10	4	0	1	0	0	0	43	10
1915.										
Gastro-Enteritis -----	26	9	22	2	4	0	9	0	61	11
Enterocolitis -----	70	26	24	8	3	0	3	0	100	34
1916.										
Gastro-Enteritis -----	7	3	2	0	0	0	1	0	10	3
Enterocolitis -----	68	27	12	2	2	0	2	0	84	29
1917.										
Gastro-Enteritis -----	4	2	3	2	0	0	2	0	9	4
Enterocolitis -----	73	29	26	8	3	0	3	0	105	38
1918.										
Gastro-Enteritis -----	3	0	1	0	2	0	1	0	7	0
Enterocolitis -----	133	49	25	3	0	0	0	0	158	52
1919.										
Gastro-Enteritis -----	29	5	3	0	0	0	3	0	35	5
Enterocolitis -----	44	20	27	4	3	0	4	0	78	24

Careful study of these figures will show at once not only the large number of cases and the high mortality, but more important still will point out that the first year is the most dangerous one for these little patients. And, if still more closely analysed they will show that relatively few cases occur during the first three months, leaving the last nine months of the first year as the really most dangerous period. The explanation of this is to be found in nothing else but the fact that during the first three months most babies are breast-fed, while after this period, for reasons as varied as they are erroneous, a good many infants are placed on artificial feeding in whole or in part. This is a very fortunate fact, for with the tender resistance of the child during these early months the introduction of hand-feeding at the outset would result in a tremendous increase not only in the number of cases, but also in the number of fatalities.

The classification of these cases in former times was based upon clinical characteristics, and was so carefully made that we still fall back upon it. Later, attempts were made to follow the morbid finding as revealed at post-mortem examinations, many writers going into minute details and adhering closely to such findings; Von Wider-

hofers went so far as to describe no less than fifteen varieties of stomach disturbances, and yet, passing to the Gastro-Intestinal Diseases, he too, found it expedient to fall back upon clinical classifications, and he speaks of "Dyspepsia," "Cholera Infantum," etc Baginsky also finds it necessary to forsake close adherence to pathologic findings though he, among modern writers, places the highest value on anatomic findings in gastro-enteric diseases. Thus, putting aside all the more minute and somewhat hair-splitting differentiations and classifications, we find, from the clinical viewpoint, the following to be the most practical classification.

(a) Gastro-Enteritis or Gastro-Intestinal Catarrh.

(b) Enterocolitis or Ileo-Colitis.

(c) Cholera Infantum.

These in reality represent varying degrees of the same condition without a superimposed bacterial infection. For it must be remembered that practically all of these cases start as an indigestion due in most cases to some error in the diet alone, or aided by secondary factors, among which, in the order named, are a weakened digestive system resulting from improper feeding over long periods without apparent clinical manifestations, improper temperatures

as seen in summer, sudden changes in character or strength of food and ingestion of spoiled food.

The first begins often with evidences of colic; the child is fretful and cries as if in pain. There may or may not be vomiting at this stage, but within a few hours diarrhea sets in, amounts possibly to four or six evacuations during the twenty-four hours. These stools are loose, at first yellow, and soon become green, mucous and contains curds; the temperature rises to 100 degrees or 101 degrees F., but soon falls to normal because these cases are self-limited in the sense that they recover as soon as the offending substance is eliminated either by Nature's own efforts with increased peristalsis, or by the dose of Castor Oil the mother has given. If the cause is not removed and unsuitable feeding continues, the catarrh becomes chronic, the muscles flabby, the skin loses its lustre and becomes detached, often being easily pinched up in folds, and the infant falls into Marasmus. Or, the attack, apparently mild at first, passes into the next stage and furnishes the severe picture of Ileo-Colitis, being the result of non-treatment or of unsuccessful treatment of the first stage, and is probably the type most frequently seen at Out-Patient Clinics and Hospitals. These show besides the manifestations of the preceding type, the presence of blood in practically every stool; the evacuations are large, watery and very frequent, usually numbering from ten to twelve in twenty-four hours; vomiting is marked and the resulting loss of fluids produce the clinical picture so characteristic that once seen it is difficult to forget. The child looks critically ill, the face is pinched, the skin is dry and can easily be picked up in folds, the fontanelle is depressed as are the eyes which appear listless, the tongue is dry and furred, later becoming clean and red, the abdomen is retracted and often sensitive to palpation, the extremities lie in abduction and slightly flexed. The temperature is elevated from a few degrees to 104 degrees F. or even higher; tenesmus and prolapse are sometimes though not constantly present.

The stage representing the "Cholera Infantum" type is fortunately much rarer. The symptoms differ in their extreme acuteness and severity, the child passing from perfect health to a

dying condition within twelve hours. The face is grey with pinched nostrils; the eyes sunken and dull; the fontanelle deeply depressed, and the extremities cold in spite of a rectal temperature of 105 degrees, 106 degrees F., or even higher; the skin is dry, and can be picked up in folds, and the abdomen retracted. The child lies in apathy or it may toss its head from side to side and lick its dry lips in the misery of its thirst. Vomiting is especially severe; the stools at first yellow and loose, soon become completely liquid and colorless (so-called "rice-water") in appearance. This condition in reality has nothing to distinguish it from the severer cases of Ileo-Colitis, of which undoubtedly, it is merely a severer form or stage, except the colorless character of the stools.

The DIAGNOSIS as necessarily follows, is to be made strictly from the clinical manifestations presented. These depend entirely upon the stage at which the case is seen, and should offer no difficulty.

In the TREATMENT of these cases our choice is to be governed directly by the type of case presented, and it should be remembered that the greatest mistakes arise from considering the milder cases trivially. It should be a standing rule that any child showing the slightest manifestation of intestinal disorder is to be considered seriously ill, and carefully observed as such. Every case with increased watery stools, and undigested food is a source of danger if not seen at short intervals, for dehydration and concurrent demineralization, when these occur, develop with such rapidity that no time can be lost in checking them; while their end results are such as to be irreparable once the toxemia (Acidosis) is established. Briefly stated, the immediate management calls for removal of the cause and the treatment of symptoms in their order of severity and effect. While it is of prime importance to clear the intestinal tract of the offending contents it should be emphasized that the routine and indiscriminate use of calomel and oil and other purgatives have their marked limitations. Where Nature in its own efforts has not only cleared the intestinal tract of the offending material, but apparently stimulated peristalsis beyond its own control and the child is in danger of being dehydrated to the point of death, surely

no one would administer further purgation. Here our duty is to arrest purgation as far as possible without risking a complete blocking of the bowel and resultant accumulation of toxins. The prime need is to re-establish the normal equilibrium of food absorption.

To allow Nature a fair chance to recuperate no food should be administered for the first twenty-four hours, depending for nutriment upon water, albumin water, and cereal waters, and of these Rice Water should be given the preference because it is the least laxative of all. As the symptoms abate whey may be given, and milk in weak formulas introduced gradually, reaching the proper normal food about the fourth day.

In the severer cases where dehydration is quite advanced the prime necessity is to furnish the body sufficient fluids to carry on its functions, dilute toxins, and promote excretion by way of the skin and kidneys. It is well when thinking of dehydration that we look into the rationale of what is going on. Knowing that absorption of fluids from the intestinal tract takes place principally, if not exclusively, in the large bowel, we conclude that the intense irritation with resultant excessive peristalsis there going on is robbing Nature of the time for osmosis to take place; and each volume of fluid carries with it every food element in solution, especially the mineral salts, but no waste products resulting from excessive metabolism incident to temperature and abnormal physiologic processes. The result is a concurrent demineralization and accumulation of waste (toxic) products; all of which, in a short time result in the manifestation of a clinical picture not difficult to recognize, but often impossible to manage; namely, Acidosis.

If vomiting interferes with the administration of fluids we should at once have recourse to subcutaneous injections, using Normal Saline. Let it be remembered that if a Hypodermoclysis is decided upon it is of little or no use to give less than six ounces; the tissues are so in need of fluids that it is surprising to see how fast it is absorbed; and, having subjected the child to the discomfort of the injection it is best wisdom to get the maximum benefit. Personally I never give less than six and often as much as ten ounces. These should be repeated in six hours as long

as they are being taken up, or, until the condition improves sufficiently to enable the child to take liquids by mouth, when plain boiled water may be given in small amounts frequently repeated. Later albumin and cereal waters thinly prepared may be given, and the normal correct food gradually introduced.

Medication has a rather limited field in these cases, and drugs should be used only for quite definite purposes. If the evacuations must be checked nothing is so reliable as small doses of Castor Oil; and by small doses of the oil is meant not more than M.v up to the age of two years, and under six months not more than M.iv, as any larger doses will have a laxative effect rather than an astringent one. In some cases it may be necessary to use drugs of more powerful action, and here there is no drug so generally valuable as opium. Its administration, however, requires discretion, for there are cases in which it does harm, as those with extremely offensive stools in which opium in any form may cause semi-stupor and even symptoms much resembling meningitis due to increased absorption of toxic materials from retention of fecal material in the bowel.

As to the preparation of the drug to use it is best to resort to the liquid forms as the Tr. Opii Camph. This can be put up with the castor oil in an emulsion, or it may be given alone as the occasion requires. In older children it may also be given in the solid form as Pulv. Ipecac. et Opii (Dover's).

The only other drugs necessary are: Sodium Citrate which is given with a view of alkalizing the system and warding off the possible development of Acidosis; and Sodium Bicarbonate administered in 2% solutions as hypodermoclyses where the symptoms of Acidosis are in evidence.

However, by far the most important item in the treatment of these cases is the management of the diet, and experience has taught that the fear of starvation has led to many fatalities. It should be understood that to temporize with weak formulas for any length of time whatever leads to a weakened system from lack of food absorption, and to increase in the pathologic process from the continued irritation of the intestines and toxic absorption, whereas, elimination of all food for 24 to 48

hours with administration of fluids gives the intestines a chance to recuperate, helps to dilute and excrete the toxins and prepares the system for the assimilation of the weaker foods as they are later gradually given.

Our own observation, made in an effort to establish how best to reduce the mortality which every year appears to rise rather than fall, have led to recognition of the fact that the most promising field for the management of this problem lies in prevention. Prophylaxis is really the key-note to a successful solution. Remembering always the happier conditions prevailing in the breast-fed cases, we should not fail to accept the hint. Mothers' milk is essentially the food intended by Nature for the particular child; it has been prepared *pari-passu* with the foetal development of the infant, and after birth this intimate relation goes on as before; the amount secreted is governed by the child itself, for by its suckling it stimulates the production, and by the amount it takes it controls the amount secreted. There are many cases of apparent inadequate milk production which if allowed time or controlled by logical management would right themselves to the needs of the child. Often we encounter a mother (usually a *prima-para*) who at first secretes little or no milk, but if the child is kept on the breast, in a few days the supply appears in adequate amount and character to fulfill every requirement. Here it would be indeed unhappy for mother and baby were the advice given and carried out that artificial feeding should be instituted directly. Again, cases are seen in which the breasts are secreting enormous amounts of milk; there is a continuous dripping, and when the child is suckled the food is not only imbibed too rapidly, but too much is taken at each feeding with resulting signs of trouble in some form: the milk may be regurgitated, or, there may develop signs of real indigestion. Too often the mother is told that the milk is unfit for the child and artificial food resorted to whereas, if the amount had been decreased by shortening the feeding period and lengthening the intervals, soon the evil would be corrected.

Chemical analyses of all the substitutes for human milk have always shown that while we may imitate fairly well, no true duplicate can be hoped

for. The best we can do is to supply other human milk by employing a wet-nurse. But even this does not give a true duplication of the milk intended for the particular child, for the differences in environments, mode of living, temperament, age, and the period of lactation will all have a bearing on the product secreted, and in turn upon the digestion of the infant.

Passing next to the product which by reason of being easiest manipulated according to scientifically based "Percentage Modification" is most widely used; namely, Cow's Milk, we find that while we are able to do much and save many babies annually, our best efforts leave us far from a correct substitute, and surely the only way more of these infants can be saved is for the physicians to urge upon all mothers the innate right of every infant to breast-feeding. Whatever we may accomplish with cow's milk modifications it is a physical impossibility to alter the chemical composition and destroy the differences that exist in the chemistry of each constituent element. We all know for instance, that the fats of cow's milk yield a higher percentage of volatile acids all of which act as irritants to the intestinal mucosa and render it fertile soil for bacterial action, and that the protein of cow's milk, by its preponderance of insoluble casein must be given in amounts that will cause intestinal disturbance if we attempt to supply the necessary amount of soluble lactalbumin. If we believe that the other and most dangerous risk (that of bacterial infection) in using cow's milk can be successfully guarded against by boiling, we are again to be disappointed; for, though we may assume the digestibility of the milk to remain uninfluenced, we cannot deny that the albumin is coagulated, the emulsion of fats damaged, the salts at least partially freed from their organic compounds, and more important, the biologic power of self-protection against bacterial destruction possessed by raw proteids is lost.

However, there are cases which do not have the benefit of mothers' milk for very uncontrollable reasons. These constitute our problems, and our best mode of meeting them is to work with cow's milk, adopting percentage modification of a milk obtained from healthy animals produced under recognized

rules of sanitation, and manipulated in milk-formula combinations to suit the individual case. To attempt to manage all feeding cases with a set of "fixed" formulas for every child of a given age, and a given set of clinical signs and symptoms will invariably lead one into vexed predicaments, for no set of cases are alike in all their needs, nor will they respond to any set routine of management.

In conclusion it should be borne in mind that our main hope of meeting this task of life conservation lies in strict observation of prophylactic measures, and the untiring efforts of every physician to do his utmost to the end that all babies be fed in accordance to the following summary of ideals:

(1) Every mother should nurse her infant unless uncontrollable pathologic conditions in the mother prevent it.

(2) Where artificial feeding is inevitable it should be scientifically applied to suit the individual case, patiently and carefully observing the case in respect to gain in weight and the condition of the digestive system.

(3) Instruct every mother to feed properly the year round.

(4) Every case with loose, green evacuations, with or without vomiting especially if occurring in summer should be considered seriously ill, given prompt and vigorous treatment, and carefully observed. When recovered, its food should be investigated and instructions for permanent correct feeding be given.

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WHAT CONSTITUTES GOOD TONSIL SURGERY.

By John W. MacConnell, M. D., Davidson, N. C.

What constitutes good tonsil surgery? This question is propounded in no cynical mood, nor in criticism of any colleague's work, neither have I any new or startling method of my own to put before the reader. My idea in this discussion is to arrive at some basic facts in connection with tonsil surgery as it is generally done, and as we would like to do it, two conditions which are not at all times similar. The proposition of tonsil surgery in its simplest an-

alysis is only that of removing two ves-tigial glands in the right and left faucial regions, on account of their diseased condition.

The operation is not a new one—rather the reverse, for it is one of the oldest operations in surgery. The early Greek and Roman divulsed the tonsil, tearing it out with a hook or with the finger nail, both of which practices are still in use and some operators make a great deal of their work of finger dissection and speak of it with some show of originality, whereas both Hippocrates and Celsus advised the method, the former as early as 460 B. C.

Tonsil enucleation is difficult because of the location of the tonsil, which is rather deep in the throat and surrounded by prominent structures and the operation is complicated by the free bleeding and salivary secretions accompanying any surgical procedure in these parts. To overcome the difficulty of operating in a narrow space, at a fair depth, various instruments have been designed, many of them freakish in appearance, some utterly void of any mechanical attraction or convenience, but designed frequently by one who was lacking in manual dexterity, and who had tried to overcome his awkwardness with instrument of many twists and turns. I was interested in counting the number of instruments listed for tonsil surgery in one of our recent catalogues. There were advertised in one catalogue alone 122 instruments for removing faucial tonsils, surely a travesty on surgical skill.

Good tonsil surgery consists in removing the tonsil in its capsule entirely, without injuring adjoining structures, particularly the faucial pillars and the musculature of the pharyngeal region. This being the proposition, it is wise to acquaint ourselves with the surrounding tissues to avoid injuring any, and to remember the anatomy of the parts. The tonsil is embryonic tissue, developed in three lobes which sometimes remain, but generally only two lobes can be made out in an adult tonsil. These are the two lower lobes, the superior lobe being found only on deep inspection of the supra-tonsillar fossa. The plica-triangularis is an operculum of tissue covering the upper part of the tonsil in its embryonic development, then splitting into an anterior fold the

plica-pretonsillaris which runs down to the base of the tongue, and a posterior fold—the plica-infra-tonsillaris, the two folds with the base of the tongue forming the fossa-triangularis. This is the region in which we work and all these tissues are to be respected, and should remain uninjured in a tonsil enucleation.

The tonsil rests in this area surrounded by a distinct fibrous capsule. Its size and shape vary, but the surrounding structures are constant, though they may be distorted by adhesions and frequent inflammations. The blood supply is chiefly from the tonsillar branch of the facial artery—which branch breaks up into smaller vessels as it enters the tonsil, and these follow the trabeculae of the capsule as it is infolded in the lymphoid tissue. In tonsils chronically inflamed, there is often developed a plexus of veins much larger than the normal, and which give great trouble in post-operative oozing without there being a specific bleeding point to ligate. The facial artery may take an upward swing where it passes beneath the tonsil and it is a possibility that it may be injured by a sweep of the knife in the deeper tissues—the writer has never seen this accident. The lower part of the tonsil may be supplied from a branch of the lingual and the posterior superior part by the palatine branch of the ascending pharyngeal. I have seen this latter condition a number of times as I am sure all of you have, and it shows as a rapid spurter in the upper segment of the tonsillar fossa.

Good tonsil surgery—should be as surgery in any other part of the body—that is it should rest upon proper respect for tissue, a proper acquaintance with the parts, every vestige of tonsil should be removed, no other tissue should be removed, and a proper hemostasis should be maintained both during and after the operation. Tonsillectomy, slitting of crypts, and the galvano-cautery have no place in good tonsil surgery. If the case needs removal of tonsils—they should be removed—just as an offending gland or tumor would be removed in any other part of the body. To do this there is only one true surgical operation and that is the enucleation with knife or scissors or the entire tonsil and its capsule, leaving the pillars undamaged, ligating any bleeding points before finishing with the pa-

tient. Whether a snare is used at the latter part of the operation is a matter of no particular importance, though most of us do so, for the lower border of the tonsil is not well defined and runs down sometimes to a point as thin as a shaving, and the snare will follow the line of demarcation down very successfully. The operation mentioned will remove all tonsils not a group of selected cases and the writer considers it the only true surgery of the tonsil. Finger dissections and the Sluder operation will be a success in a certain percentage of cases, but the writer does not think that it is wise to select several different methods of tonsil enucleation when one operation can be perfected which will successfully remove any and every tonsil. The operation outlined is equally good whether the patient is under local or general anaesthesia, and whether it is a child or an adult. The writer uses novocaine for all cases of local anaesthesia and ether for general anaesthetic. Results are as good under local as under general anesthesia, though naturally we can work more rapidly and easily under the local. Some of my colleagues inject a small amount of adrenalin-novocaine solution into the anterior pillar even when ether is used and, while not strictly a good surgical procedure it has advantages for the time, and if the operator is experienced, as my colleagues are, the same respect for tissue will be maintained whether there is oozing or not. In the hands of some, the procedure is not wise, for the operator is more daring when the tissues do not bleed and frequently goes deeper than he thinks and has secondary hemorrhage when the effect of the adrenalin wears off.

I am advocating no particular type of knife or scissors. Just a good sharp instrument introduced under the anterior pillar of the tonsil where it is not adherent, then sweeping the knife around the tonsil going well up under the frenum of the plica, for if the upper lobe is well separated the operation is half done. Traction towards the median line enables one to strip the tonsil down to its inferior pole which may be divided with the knife or snare. Retraction of the anterior pillar forward allows inspection, then any bleeding points are caught and ligated, or twisted until the fossa is dry. Especially should the

fossa be dry before the patient leaves the table or operating chair. At no other time will the patient be under such good control, and if they are taken in the operating room later to have something done to stop any hemorrhage, however slight, they have lost the necessary confidence, and are fearful that some accident might have occurred.

Hemorrhage is the bugbear of most tonsil operators and is not altogether a fanciful danger for severe hemorrhage does sometimes take place, and any man who does a sufficient number of cases will have some which will bleed. My own routing is to give the calcium salts the day before the operation in large doses, and I am confident I have had less capillary oozing or venous hemorrhage since that time. In my experience I have had four hemorrhages which were severe, though in a retrospective view they do not appear as alarming to me as they did at the time. One was an operation to remove stumps from a previous tonsilotomy of another surgeon some years before. I was operating in a strange hospital without any of my own instruments and did a scalpel dissection in which I may have wounded the pillars and the bleeding kept up until the blood pressure was lowered enough to make the flow stop. The second was on a case of known hemophilia, when I was more daring and less experienced than now, and the bleeding kept up a couple of days, then ceased and the ultimate results were excellent. The third was a middle-aged man with a bad case of pyorrhea— which cases have always seemed to bleed more than others. This oozing kept up for twenty-four hours and the patient was severely shocked before it corrected itself. The fourth was in a choreic young girl, at the age of puberty—was secondary in character—lasted twelve hours—was due to a small piece of tonsil left under the plica in the upper fossa and as the patient was removed to her home before the bleeding commenced I found myself handicapped by not having proper assistance. In a hospital her case should have been easily controlled.

I mention these cases to show that I have not yet reached my ideal in tonsil surgery. My work in examining college students for the last thirteen years and

and two and a half years of army service in examining the throats of thousands of men has given me a fair index as to how tonsil surgery is generally done over the United States, for I never look into a throat which has had an operation that I do not ask, who operated and how long since. I beg you to notice that I make no comment on the character of the work to the patient and I think we should always be careful in our remarks to the laity upon the result of any operation for much misunderstanding can be avoided thereby. The errors noticed might be summed up as follows:

First, failure to remove the entire tonsil. There is no question that if the tonsil is entirely enucleated it does not return, but if part is left, it may continue to hypertrophy and the former condition be unremedied.

Second, removal of a part of the constrictor muscle of the pharynx. This muscle is sometimes rather adherent to the capsule and if many of the muscle fibres are removed a hardened scar results and the patient will complain of a feeling of tightness in the throat which is uncomfortable.

Third, injury to the pillars, by the knife or snare, and in occasional cases, part of the velum palati has been removed and the uvula as well leaving a distorted pharynx. Fourth, some general surgeons who remove tonsils are frightened by the blood, which is more than occurs in many abdominal operations and they seek to prevent it by suturing the pillars which is always bad practice, for if any vestige of tonsil remains it will be deeply imbedded and give trouble certainly, and the sewing of the pillars together causes undue tightness of the pharynx. If at any time it becomes necessary to suture the pillars to prevent hemorrhage the sutures should be removed early and an elevator passed between them, separating them permanently.

Conclusions: There is a great improvement in the tonsil surgery of the past few years, but there is the tendency to experiment upon different types of instruments and operations rather than adopting a simple surgical technique and perfecting that operation which will suit all cases.

2. Though some continental surgeons hold that tonsilotomy is an op-

eration of choice, our experience in America is that the entire tonsil should be removed in its capsule and that if the operation is thoroughly done no injurious consequences ever follow, and that such consequences are due to imperfect surgery and not to the tonsil operation per se.

Read before the North Carolina Medical Society, Charlotte, N. C., April 20, 1920.

THE TOXEMIAS OF PREGNANCY.

Elmer S. Waring, M. D., Florence, S. C.

The obstetrical aspect which it is my lot and privilege to discuss with you gentlemen this evening is that of the toxemias of pregnancy. I feel not a little at a loss inasmuch as it has been my experience only to have the opportunity to care for a few cases of pernicious vomiting of pregnancy while one year on the East Medical Service of the Massachusetts General Hospital. A man who has not served as house officer at an obstetrical hospital or who has not suffered the hard knocks of his own mistakes through years of practice is not very apt to speak feelingly on this subject. Perhaps some of you, falling in the latter category will warm up to the discussion.

My paper will consist of Williams' classification, a few salient points on pathology, etiology, symptomatology and treatment; also of some gleanings from two papers by John E. Talbot of Worcester, Mass., concerning especially the aetiology and prophylaxis, and finally of a few cases from the records of the Florence Infirmary, reporting in detail one case which is still in the infirmary.

Certain French observers hold that such slight affections as mild headache, salivation, certain skin eruptions on the one hand and such serious disease as eclampsia on the other represent respectively the early and the advanced stages of one and the same process which they designate as hepato-toxemia. Vomiting, albuminuria, yellow atrophy of the liver and eclampsia may all be manifestations of disturbed metabolism—but these are pathologic and etiologic groupings. What we are most interested in is a clinical classifica-

tion which Williams gives as follows: Six types of the toxemias of pregnancy: 1: Pernicious vomiting, 2: Acute yellow atrophy, 3: Nephritic toxemia, 4: Pre-eclampsic toxemia, 5: Eclampsia, 6: Presumable toxemias.

Pernicious vomiting of pregnancy is but an exaggeration and prolongation of "morning sickness." There is generally a combination of at least two of the three factors,—neurotic, reflex, and toxic. The woman who makes her own diagnosis of a first pregnancy before her catamenia is overdue—if she has more than the average amount of "morning sickness" is very apt to have all of that excess due to causes justly classed as neurotic.

The hygienic treatment is social as well as personal. If she is and expects to continue to be happily married she must have her time occupied so as not to become too introspective. Mental and spiritual compatibility with her husband are as essential as physical compatibility. Many of the women seen in a clinic like this have no demonstrable psyche and we wonder how they can appear to suffer from the identical nervous malady as that which afflicts our typical highstrung, precocious, over-educated, physically frail young Southern woman. There is somebody in the medical profession who can get under the skin of the latter type and set her permanently on the right track. That somebody may as well be here as in Baltimore. Has the psychically deficient woman of our cotton farms imagination to be appealed to? Is there someone who can get under her skin? I fear not. But enough of this psychotherapeutic theorizing.

The woman who has an exaggeration of "morning sickness," must have endurable routine, enjoyable diversion, and compatible family relations. Her routine or work ought not to be too strange or too familiar, too severe or too prolonged; but it can not be too absorbing or too interesting. Washing dishes is perhaps about the commonest and yet the most impossible kind. If she lives by work, play love and worship she is apt to keep down 95 per cent of three meals a day for nine months. If she lives by work alone, or worse still by none of these, she is apt to have neurotic, reflex, and toxic elements in her morning sickness, and to have it become pernicious.

A warm drink 15 or 20 minutes before lifting her head from the pillow in the morning, an ampoule of corpus luteum twice daily to overcome the ovarian insufficiency is likely to suffice as specific diet and drug measures. Not to infringe upon the domain of the hygiene of pregnancy, let us assume a case at the end of the fourth month when first seen in consultation. How is the distinction between reflex neurotic and toxemic to be made? Not by sheer guess work, not by observation that sees with the eye but not with the brain; but by a combination of the three following: 1—A thorough history from the patient herself checked by a reliable relative not in the patient's presence; and a thorough routine examination endeavoring to detect especially a reflex cause such as malposition, and foci of chronic absorption of toxins. 2—The closest observation and sizing up of the patient by a nurse who is good at judging women, especially pregnant or nervous women, and at expressing to you her findings in terms that will prejudice no one. 3—The determination of the total nitrogen and the ammonia in the 24 hour urine. If the ammonia remains 5% or less of the total nitrogen toxemic vomiting is absolutely ruled out. If it exceeds 15 or 20% it clearly indicates that the patient is seriously ill. If the ammonia coefficient falls after a few days rest in bed 48 hours or more total abstinence from mouth feeding, continued energetic rectal feeding of not over 6 oz. of normal saline containing 1 or 2% glucose and 5% sodium bicarbonate, or 5% alcohol, or peptonized milk or eggs; and moral suasion—the diagnosis of neurotic vomiting is permissible; but if the coefficient remains stationary or rises, one probably has to deal with the toxemic variety, and the diagnosis becomes absolute if torpor, coma, or coffee-ground vomit appears.

For neurotic vomiting the regimen outlined above together with the absolute confidence of the patient in the physician is all that is required. For toxemic vomiting the treatment par excellence is induction of abortion. This should be done as soon as the diagnosis is made. Chloroform should be avoided, and under ether or nitrous oxide a vaginal hysterectomy, or in the case of a soft and patulous cervix, the use of

Goodell's or Hegar's dilators is indicated.

Acute yellow atrophy of the liver. The first fatal case in a pregnant woman was reported in 1706 by Kerbering. Between 60 and 65% of the cases occur during pregnancy. The condition may occur at any period of pregnancy, Beatty and Mason having described cases at the sixth and eighth weeks respectively. Usually, however, it occurs during the later months of pregnancy or in the first days of the puerperium. A woman who apparently was in perfect health may be seized with intense headache, pains in the abdomen, and possibly severe vomiting and purging. In a short time she becomes torpid or violently delirious and soon passes into a condition of coma which may or may not be disturbed by convulsions. There is generally a certain amount of jaundice which may vary from a mere discoloration of the conjunctivae to pronounced general icterus. The diagnosis is difficult. Marked jaundice with the other symptoms of eclampsia or pre-eclamptic toxemia, is sufficient. In the absence of marked jaundice demonstrable progressive diminution in the size of the hepatic dullness, and the presence of leucin and tyrosin crystals in the urine, with a high ammonia coefficient should be sufficient to warrant the diagnosis and the corresponding treatment, that of emptying the uterus as rapidly as is consistent with the safety of the patient.

The pathologic picture in the fatal cases, (and they are not all fatal as Dr. F. S. Newell has personally assured me) is that of an almost complete lobular parenchymatous degeneration, while the interlobular spaces with their blood-vessels and biliary canals are but little changed. This is almost the opposite of the periportal necrosis of the characteristic eclamptic liver.

Nephritic toxemia, our third consideration, is perhaps after pre-eclamptic toxemia more common than any one of the six. This because it may occur and recur frequently without ever being diagnosed clearly. Williams believes it to be the underlying factor in women who repeatedly give birth to premature infants and present a history of being perfectly well up to a certain period of pregnancy when edema and albuminuria

suddenly develop. In such cases the urinary symptoms may persist for some months after delivery, but eventually disappear to reappear at about the same period in each subsequent pregnancy. In these cases the quantity of urine may be normal or even increased in contrast to the scanty dark urine of pre-eclamptic toxemia. To know the blood pressure and the urinary findings in the non-pregnant state is all important in making this differentiation.

Naturally it is but a brief step from this condition to chronic glomerular nephritis, and the prognosis of nephritic toxemia is ultimately as bad as the strain of pregnancy usually accentuates the original nephritic process. The treatment is identical with that of pre-eclamptic toxemia, while if convulsions or coma occur it is along the same general lines as for eclampsia.

Pre-eclamptic toxemia occurs several times in every one hundred pregnancies and is far more frequent in primigravidae. It usually appears in the latter part of the second half of pregnancy, and occurs but rarely in its early months. It should be suspected whenever the patient complains of headache lassitude or edema and particularly if the urine is diminished in amount and contains albumin. The symptoms vary from euphoria, through slight malaise to those indicative of profound auto-intoxication. In this event the patient may complain of severe and persistent headache, violent epigastric pain or visual disturbances which may vary from slightly impaired vision to complete amaurosis. Given a very ignorant or questionably trustworthy patient of neurotic temperament the only way to prevent the frequent occurrence of pre-eclamptic toxemia is to insist upon the routine urinalysis and blood pressure reading every four weeks during the first six months and every two weeks during the last three months. The appearance of any albumin or the rise of 15 or 20 points in the systolic pressure necessitates repetition of these tests twice as frequently.

The prognosis is usually fair but it is entirely dependent upon the amenability of the symptoms to treatment. Chronic renal disease rarely results from this type of toxemia, and it is Williams' experience that it is unusual for it to recur in succeeding pregnancies. This of

course, is not a universal rule, but it would appear that one attack confers a relative immunity upon the patient just as in eclampsia.

As to treatment the patient should be put to bed and kept warm; put upon a restricted diet omitting meats and the coarse vegetables, or better still upon a diet of two quarts of milk per day, with a few relishes to relieve the monotony. The milk is an ideal diuretic, besides which abundance of water or cream of tartar lemonade (1 dram to the pint) should be given. The milder saline laxatives, enough to make three or four stools daily is sufficient in the way of intestinal elimination. Bi-daily blood-pressure readings and albumin tests should be carried out for eclampsia has been known to develop right under the most vigilant and painstaking obstetricians. If in spite of this observation and these prophylactic measures the blood pressure mounts higher and convulsions threaten, the next steps in order are drastic purging with magnesium sulphate which it is well to give in black coffee to prevent nausea, half grain doses of elaterin every two hours which the pharmacologists tell us is eleven times as powerful as croton oil; hot packs, and bleeding. After this there is nothing left but induction of labor or rapid operative delivery. It is too frequently forgotten that the life of the child may be almost or quite equally as important as the life of the mother. Fetal heart observations and objective and subjective fetal movements must be repeatedly used as a guide along with the sizeup of the whole social problem in making the respective evaluations at the different stages of the emergency.

Eclampsia concerning which we have all had some bitter experiences, I shall not take up in detail, but illustrate with a case. It is so very variable in the different types of obstetrical practice that no reliable figures as to its frequency are available. In some German clinics it varies from .15 to .6 per cent, and the French have commented on a marked variation from year to year. At the Boston Lying-In-Hospital there have occurred but two cases in the out-patient deliveries of twelve to fifteen hundred a year, in the past eleven years, so efficient is their pre-natal care. In hospital practice some 70 to 80 per cent of cases occur in primiparae; and twins or

hydramnios increase its likelihood four to five times. To quote Williams verbatim: "The use of *veratrum viride* which is highly praised by so many American writers, has never appealed to American writers, has never appealed to me on theoretical grounds, and Sturmer's statistics from the East India Medical Service, where it was used for twenty years, show a maternal mortality of 45 per cent. After reading the enthusiastic report of Mangiagalli and of Craigin and Hull concerning its merits, I felt that I was perhaps not doing my duty to my patients by rejecting it. Accordingly in a series of cases I gave it to every other patient while the alternate patient was treated in identically the same manner except for the *veratrum*. While the hypodermic administration of 5 to 10 minims of the fluid extract, repeated if necessary, undoubtedly led to a marked slowing of the pulse and occasionally to an almost alarming fall in blood pressure, the patients did neither better nor worse than those who did not receive it. For this reason I have abandoned its use."

The sixth heading, **Presumable Toxemias**, can be disposed of briefly. Headaches, hiccough, salivation, abnormal cravings, non-contagious skin diseases, such as impetigo, herpes gestationis, peripheral neuritis, and puerperal insanity may all be grouped as presumable toxemias. Some cases of mania and of melancholia have occurred with the urine failing to reveal the slightest evidence of toxemia, and yet the mental derangement promptly disappeared after the employment of milk diet, rest and eliminative treatment. DeLee says: "It is more than possible that some of the diseases we call toxemias are in reality infections, the casual bacterium still eluding our crude methods of investigation."

Now let us consider in conclusion the aetiology of the toxemias as a whole from as practical a viewpoint as possible. Williams speaks of six lines of investigation, viz. 1—foetal metabolism, 2—the entrance of foetal or placental elements into the maternal circulation, 3—poisoning by substances formed or retained in the placenta; 4—disturbances in the maternal metabolism; 5—anaphylactic reaction; 6—mammary toxemia. Attempt is made to fit one of these six theories as to the cause of

eclampsia. I do not see how any one of them can fit as the cause of any of the toxemias, unless it be that disturbances of maternal metabolism fits in a very general sense. Certainly such a proposition can not be considered either the determining cause or the exciting force. The former is what we want to discover in order to remove it and thereby stamp out the disease. Of it Williams confesses ignorance in these words: "Our clinical experience leads us to believe that it (eclampsia) is dependent upon a profound toxemia, which is probably metabolic in origin, but we are as yet ignorant whether the chances originate in the maternal or foetal organism or both."

On the other hand Talbot of Worcester demonstrates in 97 consecutive cases evidence of chronic sepsis in the teeth. We know that pregnancy, itself a perfectly physiological process, can break down the reserve power of the heart in a full blown case of mitral stenosis to the point of decompensation. Why can it not break down other organs whose reserve power may have been weakened by some previous or concurrent process? Every tissue which is in the process of production is in its stage of lowest resistance. The kidney, the liver, and the placenta are the three principal organs of metabolism of the blood. It is through these three that the blood stream is most sluggish; and it is these three that are most damaged as shown by the pathological findings at autopsy. It is therefore, a reasonable hypothesis to say that the symptoms of toxemia of pregnancy with or without convulsions are caused by the retention of normal physiological waste products of the developing pregnancy, this retention being due to the damaged functional powers of the kidneys, which damage has been brought about by the toxins of chronic sepsis in the blood. There is clinical evidence that this hypothesis is true. The roentgen ray has demonstrated that a high percentage of "saved teeth" have abscess formation at the end of the roots. That pyelitis is known to be a more frequent complication of pregnancy than formerly can well be explained on the recent increase in the number of undrained foci of infection which have resulted from dental practices. Nearly every baby which in Talbot's experience has developed hemor-

rhage of the new-born has come from a mother in whom was demonstrated foci of infection in the teeth, and a high percentage of such mothers have shown some signs of toxemia during pregnancy. Antepartum hemorrhage due to premature detachment, partial or complete, has long been recognized as a common accompaniment of toxemia of pregnancy. Talbot believes that this phenomenon is due primarily to an injury done the placenta either by a local infectious process, or by the toxins of sepsis in the blood stream, followed by a hematoma which may dissect the whole or a part of the placenta away from the uterine surface.

Eugene S. Talbot has a rule worth remembering, that a patient's health is worth more than all the natural teeth. From time to time in the past thirty years he has repeatedly called the attention of the profession to the fact that modern dentistry is producing more disease than any other one cause. The profession is beginning to realize the truth of this statement.

Talbot's excellent article ends with these words, and I wish to end my paper with the same words: One needs to be a believer in only a part of the statements made to be impressed with the seriousness of the situation and with the need for the removal of all known foci of infection when associated with pregnancy.

THE PRACTICAL VALUE OF ELECTRIC LIGHT IN THE TREATMENT OF INFECTIONS.

By A. J. Ochsner, M.D., LL.D., F.A.C.S.,
Chicago

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and St. Mary's of Nazareth Hospital;
Professor of Surgery, University of
Illinois College of Medicine

—Surgery, Gynecology and Obstetrics.

The object of this paper is to direct the attention of surgeons to the great value of electric light rays, especially because of their influence in controlling pain due to infection.

The rays of the sun have been used for many years, and various special light rays have been employed to a great extent, especially in sanitarium practice, usually by enthusiasts in

whose judgment neither the general practitioner nor the surgeon has had reason to place great confidence. As a result of this circumstance, one has had the feeling that any apparent benefit probably came from the element of suggestion contained in the treatment. Most of the patients treated in these institutions are neurotics who require and demand some fad, and whether the light is red or blue or ultraviolet, the result is the same.

On the other hand, the treatment of infections by means of heat is as old as medical history. There is a certain degree of heat connected with all light treatment; consequently, whatever benefit was not attributed to suggestion could easily be attributed to the heat accompanying the light.

It is a well known fact that there is a marked physical difference in the wave lengths of different light rays, and a difference in the length of waves caused by the heat obtained from heated objects and those obtained from light, and there is a corresponding difference in the depth to which these rays penetrate.

One could write a book on the differences existing between these rays and build up fine theories upon the effects of these differences, but my object is to set forth clinical observations and to leave the physics of the subject to others.

Four years ago, when I suffered from a violent infection of my elbow, it became necessary to expose the ulnar nerve when the abscess was laid open. This gave rise to intense neuralgic pains which continued for many days without cessation, notwithstanding the use of wet and dry heat.

At the suggestion of Dr. Saurenhaus, I applied an electric light apparatus. Within an hour the pain disappeared, not to return.

My natural skepticism regarding the effect of therapeutic measures led me to think this might be due to coincidence, and that possibly the pain might have subsided at this time had we not employed the electric light.

During the past four years, however, I have had an opportunity to test this method at the Augustana Hospital in 78 similar cases of infection of the extremities, and invariably the pain has disappeared promptly. Sixty-one of

these cases were infections of the upper extremity, and 17 of the foot.

In order to illustrate the type of cases in which the use of electric light is especially valuable, I will quote the history of an illustrative case now under my care at the Augustana Hospital.

Mrs. L. P., age 64, Case No. 5345' admitted February 7, 1918. Family and past history unimportant.

Present Complaint. Eight weeks ago the patient's little finger became infected. It grew red and became swollen, the swelling involving the entire hand and forearm. The third finger was markedly involved. During the past seven weeks the little finger, the third finger, the palmar and dorsal surfaces of the hand were lanced seven times, four times producing pus, and three times serum. There has been much pain in hand and arm during the entire time. Some slight soreness was noticed on third day of infection in the axilla. The treatment has consisted in free incision of areas suspected of containing pus, and thorough drainage by means of iodoform wicks, and the application of large moist boric acid dressings.

Immediately after admission the patient was placed in bed, a large moist dressing was applied and covered with rubber cloth, the forearm and hand were placed on a splint, and the electric light was applied. A small amount of fresh, hot boric acid solution was poured into the dressing every three hours, sufficient to keep it wet. The electric light was kept in action night and day. The dressings were changed every forty-eight hours.

Within an hour after the application of the electric light this patient was free from pain, and she has remained free. Within twenty-four hours after beginning this treatment the facial expression of the patient has changed from that of a discouraged, severely ill person subjected to extreme suffering, to one free from pain, contented and hopeful. The wounds improved rapidly. Within the first week the sloughing tendons could be removed without pain.

In the meantime we continued the use of large moist dressings covered with rubber cloth, adding a small amount of the fluid every three hours to keep the dressings moist. The hand and forearm were immobilized by

means of a splint placed underneath the forearm and hand, and the hand was carefully supported during the change of dressings. All unnecessary pressure and manipulations were avoided. The gauze drains which were present when she entered the hospital were removed at the second dressing and no new drains were inserted. The bone of the second phalanx of the third finger was removed at the second dressing, as it was perfectly loose in its place.

Our experience has been practically the same in all of our cases of this class, and neither we nor our patients would be willing to get on without the use of light in these cases.

We have had equally satisfactory results in the use of the electric light in treating peritonitis following abdominal sections for the relief of suppurating conditions such as appendiceal abscesses, perforated gall-bladder, etc., also in tuberculous and gonorrhoeal joint infections, in carbuncles and furuncles.

In case of X-ray burns the light treatment causes a rapid improvement of the condition, and one of my assistants who had an opportunity of treating many patients suffering from frozen extremities, assures me that his results were much better with electric light than with any other form of treatment. George W. Crile reported that in many French hospitals infected wounds are exposed to the continuous rays of ordinary electric light bulbs. He was impressed with the fact that there was a marked decrease in pain, and that wound healing progressed very satisfactorily under this form of treatment.

I would strongly urge all of my colleagues to give this treatment a careful trial, and I am confident that all will adopt it. I believe that the general introduction of this form of treatment of septic wounds, especially of extremities, in army hospitals would result in great reduction of suffering, as well as a rapid improvement in the condition of the wounds.

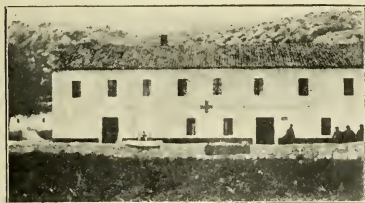
The apparatus which we have found most useful consists of a simple reflector underneath which one or two ordinary electric light bulbs are suspended. the amount of heat can be varied by changing the bulbs to increase or decrease their candle power.

NATIVE WOMEN OF BALKANS WILL CARRY ON RED CROSS WORK.

Someone has asked, "How much of all the relief work that has been done in Europe, really sinks in, and will have permanent effect on raising the standard of living among the poorer classes of the peasant districts?"

"A great deal more of it than we sometimes think," is the positive answer of one of the American Red Cross nurses who has just returned from relief work in Montenegro.

Miss Mary Ruth Lais, went from Ohio to France, to nurse the soldiers of the A. E. F. From there, she joined the American Red Cross commission to Montenegro, where she spent several months doing nursing relief work at Nicksic and Kolashin. She has just returned to the United States, full of enthusiasm for the foreign relief service that this organization has accomplished.



Two Native Montenegrin Girls Took Charge of This Hospital

During the absence of the American Red Cross from Nicksic. The only training these girls had was as pupils, for a few months, under the Red Cross doctors and nurses. When the medical personnel returned to this inland mountain town, they found these girls tending to a hospital full of desperately wounded men. This building contains beds for 100 patients, and is one of four hospitals in Montenegro, all of them being American Red Cross institutions.

At Nicksic, said Miss Lais, the American Red Cross had established a small hospital, then later, they closed the work and left the city. Several months afterward, the unit to which Miss Lais was attached returned to Nicksic to reopen the work of medical and nursing relief. Much to their surprise, they found that two native Montenegrin girls had kept open the Red Cross hospital, during the absence of the American workers, and were doing their best

to carry on their labors in accordance with the limited instruction they had received.

The only nursing training these young peasant girls had received, was a few months work under the guidance of the American Red Cross nurses. And yet when Dr. Ingebritsen, Miss Bogart (chief nurse), and Miss Lais (nursing assistant and district workers) arrived in Nicksic, they found these two courageous girls doing nursing work that might have appalled many women with much longer training.

The cometares (mountain bandits), or "comets" as they were called by the Americans, were fighting at that time. There were daily skirmishes between the Serbian troops and these men of the mountains. The wounds resulting from these fierce battles were as severe as any she ever saw in her war nursing experience in France, Miss Lais said. And yet here were these two native girls, untrained and comparatively ignorant, yet abounding in courage and poise, tending to these desperately wounded men.

"I never saw worse cases," Miss Lais explained. "These girls had not attempted to perform operations, but they had done everything else. And it was especially remarkable, when you consider the inadequacy of their training and equipment. They were caring for terrific cases, for which we nurses would think we required fracture beds and all modern appliances for bedside care, here at home. Not realizing they were doing anything more than anyone would do under the circumstances, they went about their work quietly and bravely. They had taken such good care of the supplies that the Red Cross had left, in their hasty departure from Nicksic, that they had made them last until our return for the second period of medical relief."

In her district nursing service, among the rural homes of Montenegro's interior, Miss Lais met many native customs and prejudices, some of which were a great trial to the nurse who was trying to instruct the women in modern home care of the sick.

Fresh air and water,—applied externally or internally seem to be the two gifts of nature, which Montenegrin housewives fear most. At least, that is the opinion of the American nurses who have worked with them in their

homes. Previous to the arrival of the American relief organization, there was absolutely no knowledge among the poorer families in Montenegro of how to care for their sick. When a person became ill,—he either got well, or died. The result was entirely in the hands of luck or fate. For the Montenegrin woman, notwithstanding her love for her family and her great longing to save them from death, seemed to know nothing about the little attentions to the sick patient, which every American wife and mother seems to know by instinct.



American Red Cross Hospital at Kolachin, Montenegro

Where American nurses trained native Montenegrin girls so that they will be able to carry on the hospital work, when the Red Cross leaves the country. This building was without roof or windows, when the American doctors and nurses arrived there to begin their work of medical relief. It is now in good repair and contains 26 beds and a dispensary to care for the walking cases.

It was these little, simple rules of personal hygiene and home care of the sick, which the American Red Cross nurse went into the homes of the Balkan States to teach. And even though the progress of the work seemed slow at times, and the rewards few, the American women who were engaged in that mission of health and sanitation feel that it was eminently worth while, and that its effects will be permanent and long-reaching.

One of the most beneficial phases of Red Cross work in Montenegro, according to Miss Lais, was the establishment of nurses' training schools among the native girls. In the Red Cross hospitals scattered throughout the country, native girls were admitted as aids. They were bright, intelligent pupils, the American nurses found, and were anxious and willing to serve in any

capacity. Frequently, they were of use in inducing a sick man or woman to swallow the medicine which had been prescribed by the physician in charge. Many of these aged peasants had never seen a medicine bottle in all their lives, and they were suspicious of its poisonous nature, and refused to swallow the dose. If they happened to take a fancy to the nurse caring for them, they would frequently comply with her request to take the bitter liquid or pill. Or better yet, if one of their own race assured them that the medicine would not injure them, but would make them well and strong, they would place confidence in her judgment and would submit to the medical dosage. As the American Red Cross packs up its camions, trunks, and suit-cases, and departs from Montenegro and the other inaccessible countries of the Balkan Peninsula, the work that it has established during the last two years, will be carried on by these young active girls, trained under the American tutelage.

EDWARD CHAUNCEY REGISTER.

At his home in Charlotte, N. C., in the early dawn of February 18, 1920, in the sixtieth year of life, there passed from this earth to immortality the spirit of him who in the flesh was known to us all as Dr. Edward Chauncey Register, eminent physician, distinguished medical editor, able and successful organizer of the many phases of modern medical activity, as societies, hospitals, etc., sanitarian publicist, upright and respected citizen and loyal friend, born on a farm in Duplin County, N. C., in 1860, sturdy North Carolina folk, descended from English ancestry, implanted in this soil a few generations back.

The early life of Dr. Register was similar to that of the average rural lad, coming into the world in those troublous times, and growing up in the days of scarcity in the South following the Civil War. His early educational opportunities were meagre, and he was well in his teens before he began to realize the possibility of attaining his boyhood ambitions, to have books, acquire an ed-

*Presented by request of the President at the annual session of the Board of Trustees of Trinity College, Durham N. C., June 7, 1920.

ucation, and become a man whom the world about him would respect and honor. In his twenty-second year he entered the University of North Carolina, where he spent two years and was in latter years written of by Dr. Kemp P. Battle, the president, as a "faithful and excellent student."

Leaving the University, he went to New York City, where he engaged in the study of medicine in the University of New York, from which he was graduated with the degree of M. D., in 1885. While a student here he attracted the favorable attention of the late distinguished Dr. William M. Polk, who predicted for him a career of success, and advised him to stay in New York City; but the lure of his home State, coupled with the immediate necessity of earning his living, influenced his return to North Carolina, where after procuring license from the State Board of Medical Examiners in 1885, he began the practice of medicine at Enochville, in Rowan County. Success early came to him, and quickly he became known as one of the most capable and active young physicians in that section. Within a year he realized the professional limitations of his environment; and while I more than once remember hearing him to refer to those Halcyon days when he realized he was going to win in life, his restless spirit yearned for larger fields of activity, and a little later he removed to Charlotte, opening almost simultaneously an office for the general practice of medicine, and founding with his brother-in-law, Dr. John C. Montgomery, the Charlotte Medical Journal in 1887.

It was the privilege of the writer to become a member of the North Carolina State Medical Society at its annual session in Charlotte in 1887, and he carried home with him the impression that Dr. Register was one of the ablest men he met. Charlotte was then, as perhaps now, the leading medical center of the State, with an educated and cultured medical profession, whose fine traditions and practices were held high by such as the elder Grahams, Gibbons, and other of like professional eminence. Among these choice spirits he was accepted as a Doctor of Medicine and a man of superior type, and it may be truly said that the history of local medicine in Charlotte, as well as in the State, was from then on, for thirty years,

closely interwoven with his own; caring for the onerous responsibilities of active practice and consultations with numerous colleagues in his home and the adjacent counties, he successfully conducted the Medical Journal he had founded in 1887 to the day of his death.

Besides the enormous amount of editorial writing, a careful study of the current professional literature emitted from North Carolina to Australia and India, he yet found time to prepare and publish a n attractive 8-vo. volume on "Fever Nursing." This book, published by the leading medical book firm of Philadelphia in 1908, was immediately adopted as a text book on that subject by many leading colleges in America and elsewhere, and a European edition printed shortly after the American.

Choice honors of his profession were freely accorded him. He served a term of six years as a member of the North Carolina State Board of Medical Examiners, being elected President of the Board by his confreres. He was a councillor of the State Medical Society and President of the Society in 1906. His President's address on "Medical Education," elicited wide-spread and favorable comment. Governor R. B. Glenn appointed him a member of the State Board of Health in 1905 for a term of six years, a well merited compliment conferred again in 1917 by Governor Bickett. In addition to his membership in the State and County Society, he was a member of the Tri-State Medical Association, the American Medical Association, the American Public Health Association, and also the American Medical Editors' Association, being President of the latter at the annual session in New York City in 1915. He was president of the Tri-State Medical Association at the Charleston, South Carolina, session in 1915, where his President's address was a most masterful plea for an independent medical press, which enjoyed the compliment of the immediate publication in the Journal of the American Medical Association, whose editor was pronouncedly antipodal to the views and policies therein enunciated. He traveled extensively, and his travel letters to the leading North Carolina daily newspapers circumnavigating the globe in 1906 were read and enjoyed by many.

Dr. Register held for some years the professorship of the Practice of Medi-

cine in the North Carolina Medical College at Charlotte until the college was discontinued in 1915.

Dr. Register was a man of striking personality, of tall, rather slender form, and surmounted by rather massive head, covered with an unusually heavy suite of silver gray hair, with a high, wide forehead, keen, penetrating, blue eyes, thin clear-cut lips; a form and face which would anywhere both attract attention and command respect.

He was happily wedded in 1887 to Miss Levinia C. Montgomery, daughter of the distinguished North Carolina jurist, Judge Wm. J. Montgomery, of Concord, N. C.

En passant, I may be permitted to observe that this most excellent lady proved in the fullest sense of the term indeed a help-mate to him in almost every phase of his busy and active life, and survives him to continue the kind friend and cheery companion of those in her environs in need of sympathy and friendship.

Dr. Register has passed too recently, and the writer was perhaps too close to him in friendship's tie to pass a true estimate of him as a man. Suffice it to say he was of pronounced convictions, positive in his views of most things concerning and affecting him or his interests, persistent and determined to a degree that at times evoked the admiration of his friends and often challenged the criticism of opponents. His was a loyal friendship and his antagonism worthy of a foeman's best steel.

Patients, of many years and needs clung to him after his health failed, and his possible activity to serve them greatly diminished, two year prior to his death, believing him the most capable doctor and the best friend they had on earth.

Dr. Register was a Southern Democrat in his politics, thirty-second degree Mason and a Shriner. He was for many years a member of the Tryon Street Methodist church, Charlotte, N. C., and no doubt every pastor of that church during his membership could give cheerful assent to the statement that he did not let his right hand know the frequent courtesies of his left.

One of the chief honors and most highly appreciated of his many was his membership on the Board of Trustees of Trinity College. He always attended its meetings and manifested ever a lively interest in its various functions.

From these annual memorial exercises, which I trust never to see this Board of Trinity College Trustees too busy or preoccupied to conduct, the living should learn anew the lesson that is as old as sacred history. The lesson is this: "It is better to go to the house of mourning than to go to the house of feasting, for that is the end of all man; and the living will lay it to his heart." A sanctuary of sorrow is a crucible in which to purify the soul. May our contemplation of the life and character of our dead friend and brother be to us a constant reminder of the serious meaning of that irrevocable decree: "Man is born to die." Though oft times industriously struggling for fortune and as sedulously striving for fame endeavoring to "lay up for ourselves" diversified "treasures upon earth," let us remember, that death comes nearer to every one of us with each fleeting breath; that it comes indifferently, "as a thief in the dead of night, or as a royal guest at the blaze of noon." Let us bear this well in mind, not that our days may be consumed with impotent grief or our lives clouded with dispiriting gloom, but rather that we may be impelled to make timely preparation for the coming of the inevitable hour in which every man must surrender his own soul.

"And when the Angel of Shadow
Rests his feet on wave and shore,
And our eyes grow dim with watching,
And our hearts faint at the oar.

"Happy is he who heareth
The signal of his release,
In the bells of the Holy City
The chime of eternal peace."

With the abiding faith of earnest men that everything in the universe was designed by the Supreme Architect for some purpose of ultimate good, with the persisting faith of Christian believers, that all who earnestly strive shall eventually wear perfection's crown, let us go forth, with hope in our hearts and courage in our breasts, to fight the good fight, to finish our course, and unqualifiedly keep the faith.

"And when earth's last picture is
painted
And the tubes are twisted and dried;
And the older colors have faded,
And the youngest critics have died,

We shall rest, and faith we shall need it.

Lie down for an eon or two,
'Til the Master of all good painters
Shall set us to work anew,
And those who were good shall be
happy,

They shall sit in a golden chair,
They shall splash at a 10-league canvas
With brushes of camel's hair;
They shall have real saints to draw
from,,

Madalene, Peter and Paul,
They shall paint for an age at a sitting
And never get tired at all;
And only the Master shall praise us,
And only the Master shall blame,
And no one shall work for money,
And no one shall work for fame,
But each for the joy of the doing,
And each in his separte star,
Shall paint the thing as he sees it,
For the God of things as they are."

J. HOWELL WAY, M. D.

Waynesville, N. C.

THE AUTOMOBILE AND THE HIGH COST OF LIVING.

By CAROLUS M. COBB, M. D., Lynn, Mass.

Written for THE CHARLOTTE MEDICAL JOURNAL

We have a club in our city which we call "The Book of the Hour Club." Beginning in October we meet once a month until June, and discuss some book which the member who reviews it has selected at the previous meeting. The plan is to discuss new books, but we do not always adhere to this program. Of course, during the war we have, naturally, discussed the greatest event it will ever be our fortune to know. Since the end of the war the question of social unrest has received a goodly share of our attention. We are all pretty well agreed that the disease condition with which we have to deal is the overgrowth of the industrial centers. Living in Massachusetts where 85 per cent of the people live in towns of 5,000 or over we have an illustration of the evil effects of this overgrowth constantly before us. As a matter of fact the people of this state would starve if outside transportation was entirely cut off for two weeks.

We realize that knowing what the disease is does not cure it, and we also realize that telling the people that they should, as a simple duty, get back to the

land has no effect. A farmer cannot be made out of a shoe worker by argument. You may show him that the farmer gets his living with fewer hours of work than any class who live by manual labor, but it does no good. Very likely he does not believe the statement, even if he does he is not interested. I have tried it and I know. Although I was brought up on a farm and know whereof I speak I cannot convince any one in the city that the farmer works less hours during the year than the shop worker.

Nevertheless knowing the disease and the causes which led up to it, is a great help in trying to solve the problem. I propose to call attention to some of the causes which underlie the present condition and to point out a possible remedy which I believe is already at work.

The first of these causes is the gregarious instinct. This has the characteristic of all true instincts in that it is common to animals as well as men. Even an unsocial animal or man will attach himself to a crowd even when he does not care to associate with the individuals. Very likely this instinct originated in the desire for protection in time of danger. If the herd or crowd ceased to grow when it was large enough to furnish adequate protection, or to advantageously accomplish its work all would be well, but, unfortunately, it does not do this. On the contrary the crowd continues to grow until its very size is a danger to the individual. An illustration of this was seen in the vast herds of buffaloes in the West. Again cities of moderate size are a benefit to the industrial worker, but the large cities defeat the very purpose of their existence. When the city grows too large it costs more to maintain the workers and in every other way the cost of doing business is increased. In spite of this the larger the city the more it will grow like the herd of buffalos until the shortage of food or disease kills off a part of the herd.

The second great cause of the overgrowth of the cities is the steam engine and the part played by it cannot be overestimated.

Without the steam engine, in its various forms, the modern city would never have been built, and could not now exist. It is the foundation of modern industrialism. It makes work for the people to do and brings them to the cities to do

it. It also brings food to feed the workers. When the steam engine was perfected no one in the wildest flight of imagination could have foreseen the effect it would have upon the people industrially, socially, morally, and politically. One of these effects we have been very slow to appreciate, and that is that it has increased manufacture at the cost of food production. This increase of manufacture at the cost of food production has gone on so gradually that it has not attracted much attention until now when it has become a serious menace. The all important question today is the production of more food. How can it be done? You cannot argue, cajole, or drive people back to the land. Whatever draws people back to the land and to more food production must be something that originates within themselves so that they go willingly.

The most curious phenomena in history of our progress towards civilization is that we are not able to recognize the tendency of the forces which cause the great changes. Many of these forces originate in such unexpected ways that they look almost like accidents. Let me give one instance out of thousands. Feudalism held Europe in chains for hundreds of years and the Crusades show it at its height. No one who participated in them, least of all the organizers, dreamed that the Crusades marked the beginning of the downfall of Feudalism. Yet such they proved to be for some one brought gunpowder back with them from the East and Feudalism was dead. An hundred years ago no one foresaw that the steam engine would tend to produce a shortage of food which is today a serious world menace.

Today we are just beginning to see the effects of another invention which may cause a revolution in the opposite direction. The internal combustion engine when it was perfected enough to be applied to transportation was considered only a toy of the rich. Today it may prove the salvation of the poor because it has a tendency to increase the production of food at the expense of manufactures. It makes living in the country pleasanter, transportation for short distances cheaper and more certain, and it is the greatest labor saving device ever applied to farm work. It makes machinery do much of the farm

work which was formerly done by main strength and awkwardness. With it the farmer can prepare his land, sow his seed, harvest his crops, transport them to market, and more than all else keep in touch with the social life of the neighborhood. Sometime I think I will write a paper on the automobile as an enlarger of the neighborhood.

All this may not seem to have any direct relation to medicine, but a little reflection will show that it is most intimately connected with the health of the people, and any force which affects in any way the well being of the people is most peculiarly the province of medicine.

Roentgenization of the Vessels.

C. L. Martin, Boston (Journal A. M. A., March 13, 1920), has studied the roentgenograms of the large vessels under various conditions, such as arteriosclerosis, hypertension, chronic endocarditis, high diaphragm or dilated pulmonary artery which may confuse the diagnosis and in his article covers the findings rather extensively. It would probably be wiser to accept the diagnosis of aortitis only in those cases that show localized prominence at the base of the ascending aorta. All of these conditions are not uncommon with aortitis, and a high diaphragm is not infrequently associated. It is the exception rather than the rule, he says, to find a single cause underlying increased supracardiac dullness. A number of cases are reported illustrating the conditions found.

Dysenteric Abscess of the Liver Cured by Emetin Without Operation.

About ten cases of this remarkable therapeutic success have now been recorded, which almost places emetin at the head of specific remedies. The latest case to go on record is that of Chauffard and Francon. Diagnosis was made by puncture and radiography and even after the first injection of emetin improvement was noted. About three weeks were required for a complete cure. Of interest was an aberrant Wassermann, not due to syphilis, but to the amebiasis and abscess. This became negative in about a fortnight. Five injections of emetin were required for a cure.—La Presse Medicale.

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CHARLOTTE, N. C.

"Read not to contradict and confute, nor to believe and take for granted, nor to find talk and discourse, but to weigh and consider."—Francis Bacon.

"OUIJA SAYS."

The ouija board craze has grown to alarming proportions recently throughout the entire country.

Why? What does it mean?

Humanity is emotional and subject to fads—when "Simon says thumbs up" Simon gets the laugh if "Simon wig wags." Fear of being laughed at makes us absolute slaves to the customs about us. But why this fad of the ouija board?

It seemingly was started as a means of providing an evening's entertainment, perhaps because with the advent of prohibition the evening otherwise would have been a dull one.

Press dispatches have reported a number of persons who have become demented because of their absorption in following the mysteries of this board.

Doubtless the country contains a far greater number of ouija addicts than we realize. Are we suppressing (trying to) alcoholic and narcotic addiction and allowing a potentially powerful and very subtle ouija addiction to supplant them.

We hope the Harrison law and prohibition will in some way lessen degeneracy but if ouija addiction drives men and women crazy are its "spirits" better than the "spirits" of liquor.

Will our children's children be proud of a lineage that worshipped the ouija fetish. If the enlightened present day civilization fails to condone "Salem witchcraft" will the sons and daughters that follow condone the ouija?

Brains vs. Parrots.

Just a little while ago our medical schools, not one but most of them, taught that the way to take out a small child's tonsils was to wrap its arms

about with a sheet, pinion its legs between strong knees and with head held firmly against an attendant's breast "take them out." Some one had said that was the way to do it and every Simon's thumb had to go up or he was an object of ridicule because he was not "up-to-date." Today some men denounce that as a cruel method and say there is a better way.

Just now there is a small rift in the clouds through which appears a faint light in current medical literature indicating that a doctor need not be crucified for failing to do an appendectomy when his inner conscience told him that "Johnny" had a real old fashioned "tummy ache."

The point is that sane and mature doctors with minds developed by years of training and experience are carried wily-nily, hither and yon by some fad or fetish doing the things that others do without stopping to study or reason the individual case on its own merits.

The medical profession needs brains—not parrots or monkeys.

Do Patients Have Intellect—A Will—A Soul?

Frequently a detail man—a salesman—enters my office with a line of chatter which he was determined to rattle off without being interrupted. I tried to stop one of them once to ask a question and he barely halted long enough to give me a very unsatisfactory answer almost in monosyllables, then continued his oration. These men make one feel that they don't know human nature. They act as if the matter of supreme importance is to get off their rigmarole from start to finish just as they memorized it from some ambitious sales manager. My whims and individual peculiarities were matters unworthy of consideration, and also whether I was listening to the harangue or not was of minor importance.

They created the impression that they were parrots sticking up their thumbs because "Simon (the sales manager) says thumbs up," or perhaps they considered me as without brains or reason and had only to be talked to as if I were being made into a phonograph record.

There are many doctors, failures, because they never quite get the idea that patients have an intellect, a will, and a soul.

More and more is the human economy becoming considered nothing more or

less than an animated chemical laboratory and the soul of the patient has become almost a forgotten factor. The patient's individual peculiarities figure but little, and the mind within him which is of so vital importance in controlling his physical, physiological and chemical reactions is ignored.

The profession needs all the laboratory help that can be perfected but our patients need doctors who can read these findings in their proper relation to an animated human being, no two of whom are just alike.

"Can Any Good Thing Come Out of Nazareth?"

Just recently the word comes from Ireland that, for the first time in history, there appears in the King's list of civil honors, a riveter having been made a member of the order of the British Empire, for establishing the world's record in driving rivets.

Isn't our altruistic, democratic Medical Profession, too much given to making a fuss over the "grand stand players" and forgetting the man who although outside the bright rays of the spot light, is nevertheless getting results, and giving his life in an earnest honest effort to get sick people well.

Once in a while a man looms up from the plantation and becomes a Marion Sims, but thousands of others from personal choice, remain on the plantation doing some special work in their own individual and original way, getting results that the Sharlie Chaplins of the profession could hardly match.

The fountain of knowledge is within and about us and the man deserving to be heard is the earnest, conscientious hard worker—the riveter—whether his office be on the plantation or along the great white way.

A Well Bridled Tongue

Shallow minds are inclined to let words drip from their tongue like a never ceasing pitter patter of rainwater—

"Empty vessels make the most noise."

Very few doctors are ever "dismissed" for being too quiet, but some lose the case because of their undue weakness for gabbling.

A man who is good at making excuses is seldom worth much for anything else.

A great many young doctors, both

well educated and poorly educated lose their chance of success by being too voluble.

The Japanese have a proverb which says:

"A look is better than a thousand words."

"My doctor is simply wonderful. His cheerful smile and hopeful expression are worth a million drug stores.

"The grouch throws sand into the machinery."

"The days' mile can be shortened by prefixing an 's' to it."

THE NORTH CAROLINA SECTION OF THE CLINICAL CONGRESS OF THE AMERICAN COL- LEGE OF SURGEONS.

Dr. John Wesley Long, secretary of the executive committee of the North Carolina Section of the Clinical Congress of the American College of Surgeons, is making an inventory of the surgeons in the State. The list will include not only those who are devoting their entire time to surgery but physicians whose practice includes fifty per cent of surgical work. This, in towns of less than 50,000, makes one eligible to fellowship in the college.

While a surgeon must have been practising eight years to become a Fellow, it is a good policy for those who have been in the work nearly long enough, to line up and get themselves on record.

The American College of Surgeons includes other specialties than surgeons. It takes obstetricians, ophthalmologists, rhinologists, oto-laryngologists, gynecologists, urologists and orthopedists.

North Carolina is entitled to two hundred Fellows in the American College of Surgeons. Fellowship is based upon certain qualifications. Surgeons under forty must stand an examination which consists in a detailed report of fifty minor and fifty major cases they have operated upon. However, before examination paper with instructions are sent to an applicant, he must be recommended by the State Credentials Committee. Therefore, it behooves those who wish to join to write to Dr. John Wesley Long, Greensboro, N. C., Secretary of the Executive Committee for a blank questionnaire.

It is a deplorable fact that there are a number of surgeons in North Carolina who are eligible for Fellowship but who are kept out because of a lack of initiative on their own part. Strange as it may seem, some men do not apply from pure timidity, fearing they will be rejected; others hesitate for the reason that they do not keep proper records of their cases; while occasionally a so-called surgeon is too lazy or indifferent to copy the records of the patients he has operated upon.

If our North Carolina surgeons would remember that the American College of Surgeons is inclusive and not exclusive, that it represents the highest type of surgery, that it is standardizing both surgeons and surgery as well as our hospitals in their every detail, it is believed that they would exert themselves to gain Fellowship. Any thing that is worth while is worth striving for.

The organization of the North Carolina Section of the Clinical Congress of the American College of Surgeons will undoubtedly prove an object lesson to the profession of the state. The Section will hold clinics at various point in the State and do much other work of a scientific character to help develop the practise of surgery. The first clinic will be held in Charlotte.

DYNAMICS OF THE MIND

At least three-fourths of the world's physical ailments spring directly or indirectly, from conditions of the mind. For in the latter is generated that formative energy which gives type, expression and moral survival-value to man. With unerring accuracy the body expresses in anatomical modifications the ruling conditions of the mind, though the slow processes of the body as compared with those of the mind, require an increase of time for the mental causes to become distinctly visible as physical effects. With the exception of sudden mental shocks, it may take years before the cells of the body can give expression to the creative or degenerative processes of individuality arising in the mind.

Hence a handsome face and an ugly mind, and vice versa, may meet us in the same individual, as witness the facial homeliness and mental beauty of Socrates, or the demoniacal mind of a Lucretia Borgia screened behind a face of resistless witchery. Sooner or later,

however, the metamorphosis of human nature will come to the surface and reveal in the poise and lineaments of the features the character of the thoughts and motives actuating our daily life. It is therefore mostly in the latter part of life that we find ourselves demasked, in our own unmistakable selfhood—either in personal refinement, dignified poise, purity of features, character in bearing and a general touch of human sympathy; or on the other hand in a lowering of the whole human aspect—vulgarity of touch, crudeness of movement and a sneaking, insincere expression of the entire countenance.

"Man is what he eats" is only a half truth; the whole of the truth is that he is what he thinks. For such an all moving lever is the mind that an intense, sustained emotion will mould the body as a potter moulds his clay. A vice, to sway the body, must first sway the mind. A drunkard is first drunk in his mind. Similarly with the glutton. The body is powerless to indulge a single vice, or sustain a single virtue, which is not previously sketched and rehearsed in the mind. Twilight-pipe-dreams, sense-clouded armchair-philosophies, revelries of unshackled phantasy—establish circuits of mental energy by which corresponding bodily functions become organized into automatic, self-sustained activities. The entire field of personality, its indulgences and regrets, its flights and collapses, is a shadow-play, in which the real actors are hidden from view; while the ominous reality of the soul-drama with its "dramatis personae," representing every type of the heroic or beastly, the sacred or infamous—is surmisable only in the accompanying rise or fall of character and expression. Psychology, psychopathy, psycho analysis are systems of procedure by which science endeavors to trace the hidden circuits of reciprocity between unrestrained mental indulgences and their consequences in morbid physiological reactions.

Purity of the body is of greatest importance to human efficiency, but purity of mind is incalculably greater. It is this thought that forms the basis in the crushing parallelism in the 25th chapter of St. Matthew between the minds of the Pharisees and the Whited Sepulchres. The all-important duty of man, in relation to his mind, is to guard its

sacred precinct from the intrusion of every influence hostile to purity and virtue; and as its faithful censor promptly erase from its repertoire every feature not gauged by the unwavering determination to be a living power of universal good will, personal integrity and altruistic energy.

Dr. Axel Emil Gibson,
Los Angeles, Cal.

Urology

A. J. Crowell, M. D., Department Editor

After six years of experience Mitchell concludes that (1) the Swift-Ellis intraspinal method of treatment of syphilis of the central nervous system is superior to intensive intravenous treatment alone. (2) Whether the efficiency of the method of treatment depends on (a) the irritative action of the serum, thereby increasing the permeability of the choroid plexus for arsphenamine; on (b) the spirocheticidal action of the arsphenamized serum, or on (c) spinal drainage, remains to be determined. (3) The method is perfectly safe when care is exercised in the technic and in the proper selection of cases, and should be resorted to in all cases in which the patient fails to respond to intravenous medication.

Archives of Dermatology and Syphilology, July, 1920, p. 40.

Ormsby advocates the repetition of short courses of arsphenamine on alternate days with mercury during the interim as the best method of treating active syphilis. In a series of 160 private cases he reports the following results after from two to five courses had been given. Sixty, or 27.5 per cent remained clinically well and Wassermann negative as tested for periods varying from one to three years; thirty-six, or 22.5 per cent were identical with the foregoing except that they were watched only for a period of from six to nine months after completing treatment. Fifty-two, or 32.5 per cent he classes as doubtful as they disappeared after receiving two or more courses of treatment. Twelve, or 7.5 per cent failed to respond even after several courses of treatment. Jour. A. M. A., July 3, 1920, p. —.

Stokes and Bussman have recently called attention to a group of reactions

following the administration of arsphenamine which they attribute to a substance contained in new rubber tubing of a certain brand. They found that these reactions only occurred after using new rubber tubing and that the toxic substance could be removed by first boiling the tubing in a weak alkaline solution. They not only produced the reactions in the human but experimented on a number of dogs, checking the experiments carefully with controls. Journal A. M. A., April 10, 1920.

Gynecology and Obstetrics

Robt. E. Seibels, M. D., Department Editor

Frankness to Patients—While it is undoubtedly true that our patients have no more right to all our information than to all the medicine in the pharmacopeia, many practitioners have erred on the other side and have either withheld the truth to which their patients had a right or have allowed their optimism to run away with good judgment. The new cults and self-styled sciences have gained enthusiastic supporters from the ranks of those who have been falsely led to believe that one or another procedure would cure them, "without fail," and their disappointment and chagrin are as great as their faith in a cure formerly was.

That a badly lacerated and eroded cervix, with cystocele and rectocele, may so upset a woman's general nervous mechanism that she has headaches or backache or even "indigestion," and that these symptoms may be relieved wholly or in part by the correction of the pathological anatomy, is obvious to all. A cure under the circumstances cannot be guaranteed or promised.

We still encounter patients with lacerated and relaxed preineums who say the obstetrician assured them after childbirth that there was no tear at all. Here, possibly, the obstetrician was not frank even with himself; he didn't want to know the true condition.

And, finally, the example of the patient who demands that something be done. There is no obvious pathology but she has some pain in her menstruation or, having been operated upon once, she is sure she has adhesions — she knows where they are to a fraction of an

inch. If thorough examination reveals negative findings, is not a frank statement better than tonics, tomponnade or curettage?

The Treatment of Uterine Fibroids—

Two notable articles in contemporary literature on this subject sum up the views of modern gynecologists. W. J. Mayo (J. A. M. A., 74: 1685, 1920) has brought to our attention the importance of conserving the menstrual function. Even if pregnancy is not possible after extensive myomectomy or resection, the maintainance of the menses is of real value in retaining the nervous balance. A. A. Matthews (Northwest Med., 19: 15, 1920) quoted in Internat. Abstr. Surg., reviews the results of 100 consecutive hysterectomies done at St. Luke's Hospital, Spokane, Washington. He concludes "That uterine fibroids should be treated by myomectomy rather than hysterectomy or with radium or the X-Ray. When radiotherapy is used in such cases the functions of the uterus are lost and the ovarian function, which it is most important to retain, is destroyed. The roentgen ray and radium should be considered only in conditions in which there are serious renal or pulmonary complications and for extremely weak patients who cannot stand the physical shock of an operation."

Orthopaedics

Alonzo H. Myers, Department Editor

SACRO-ILIAC JOINTS.

The tendency to ignore indefinite pain in the lower back by both the laity and many members of the profession has been my previous experience and is frequently seen in my practice now. This apparent unfamiliarity with what we in Orthopaedic world consider a most important joint has stimulated me to give this brief review on anatomy and symptomatology. The structure of this joint will also explain why its mobility should be preserved instead of destroying its function by bone grafting and producing an ankylosis. This I think is a grave mistake in the majority of cases, however, I shall not attempt to discuss the treatment here.

Recent investigation showed that the sacroiliac joint possesses all the histo-

logical structures of a true joint. It possesses a certain amount of motion which has been accurately measured in the laboratory, and by the obstetrician in practice, as demonstrated by the Walcher position. The sacroiliac joint has an ear-shaped articulating surface of irregular contour, is almost vertical in position, contains hyaline, cartilage and synovial membrane and its surfaces are bound together by anterior and posterior sacroiliac ligaments which are ligaments of the strongest variety, the posterior being the stronger of the two. In front of the sacroiliac joint lies the lumbosacral cord and sacral plexus, which gives off branches to the pelvic organs and lower extremities. The sacrum moves either forward or backward through the third sacral segment. It plays an important role in hyperflexion and hyperextension of the trunk upon the pelvis. In considering the functions of the sacroiliac joints it is well to look into the muscles which control this function. The posterior musculature, which has to do with this motion may be divided into (a) an upper and (b) a lower group. The first consists of the erector spinae with its tendinous attachment into the sacrum below; the second, the glutei and hamstrings, which are attached to the ilium and tuberosity of the ischium. The principal function of the lower group, when acting from a fixed point below, is maintaining the balance of the pelvis upon the head of the femur and in further contraction producing hyperextension of the trunk.

Baer classifies sacroiliac strain into two classes: Class A, in which the superior border of the sacrum travels posteriorly, producing the flat back type; Class B, in which the superior border of the sacrum tilts forward, producing the hollow back type.

Symptomatology.

In the traumatic variety we have a history of a mild or severe strain, generally with the body in an awkward position. The pain may be simply an ache, occurring in the lower back, or it may be so severe as to totally incapacitate the patient. The pain is so great at times that any motion causes pain, especially bending to the front or to the side. At times a patient when turning around, will lift his limb with his hands. Pain is usually indicated at the sacroiliac

joint, over the center of the sacrum, or at the base of the ribs. It may be referred to the calf and the heel, according to the portion of the nerve involved. As a rule the pain in the beginning is not referred down the limb, especially in mild types, but in an acute severe type, the pain may be referred from the very onset down the leg.

There is limitation in forward bending and side bending toward the affected joint. The pain is also complained of at the base of the ribs. This can be explained by the origin and insertion of the erector spinae muscle, pain at origin may be referred to insertion of the muscle. Kernig's sign is positive, producing either pain at the joint or at the insertion of the hamstring at the knee.

Radiographs.

A radiogram usually helps in its negative findings in ruling out disease, although you occasionally get a lipping of the lower limits of the joints which is the result of a hypermobility.

State Medicine

L. B. McBrayer, M. D., Department Editor

Community Medicine.

The above title is the subject of a paper by Dr. E. C. Meyer, Director of Surveys and Exhibits, International Health Board of the Rockefeller Foundation, New York City, the paper appearing in the June issue of the American Journal of Public Health as the leading article. We desire to urge that every physician in North Carolina secure a copy of the above mentioned Journal and study this article. The Journal may be obtained by addressing the American Journal of Public Health, 124 W. Polk street, Chicago, Ill.

We are making this request for the reason that Community Medicine or State Medicine or Sickness Insurance, each of them driving at the same idea, is coming sooner or later—perhaps sooner—whether the physicians desire it or not. We are particularly anxious that the physicians in North Carolina shall be thoroughly familiar with the ideas advanced on this subject, to the end that they may take a large part in shaping the legislation which brings it about. We do not hesitate to say that unless the physicians do act as suggested above, the legislators will go wrong

to a greater or lesser extent, and if the laws that are hereafter enacted on the subject militate against the physician, it will be his own fault.

May we suggest also that every physician read the able address of President Reynolds before the last session of the Medical Society of the State of North Carolina on this same subject. (Refer to Page 1 this issue.—Ed.) It will be remembered that Dr. Reynolds' address was neither pro nor con, but was a resume of the views of different people on this subject with such comments as seemed pertinent.

Dr. Meyer points out a thing that has been often said and is familiar to everybody and must then be true, to-wit, that the well-to-do and the very poor have ample hospital accommodations and medical attention, but the middle class—the largest of the three classes—does not have the same facilities by any means.

The paragraph in Dr. Meyer's paper devoted to the physician's side of it is very interesting indeed and perhaps more ably handled than we have ever seen in print. He claims that, taking it all around, it would be very much better for physicians. Of course the few physicians who are making large amounts of money, and they are very few, will probably have their income decreased. But for the remainder of the physicians it would be found very, very satisfactory. They would be able to do better work with less labor and with a great deal less expenditure of money for office equipment and other things. Dr. Meyer says that the mediocre physician, then as now, will come in for a small share of the emolument.

Dr. Meyer also discusses very ably its effect on community health and among other well said things, he makes the point that the people would save enough money that today is being wasted in drug stores and other places on patent medicines to pay the physicians larger salaries than they now get and save the total amount they pay to physicians at present. He quotes Dr. Goldwater as saying that one retail drug firm in Boston did a business of \$3,000,000 in one year, the very large part of it being for patent medicines. Dr. Meyer mentions also that there is a great deal more medicine taken by the people than should be and hence there is a lot of money wasted in this way. As an ex-

ample he states that two billion doses of quinine are consumed in this country annually. The large part of this is consumed in a haphazard way and more than half of it, we would guess, is not needed.

The last four paragraphs of Dr. Meyer's paper are so good that we take the liberty to quote them in full:

(1) There can be no question that in this movement the spirit of individualism is in conflict with the spirit of co-operation. Nor can we deny the immense value of individualism to our progress in every field of activity. We have always pointed with pride to the fact that our phenomenal development was due to a spirit of freedom and enterprise born of an indomitable spirit of individualism. Medical men, undoubtedly, share in full measure in this same spirit. Every doctor wants a chance to stand or fall on his own merits. He wants the greatest opportunity of individual success and is willing to pay the price of individual failure.

(2) We are learning, however, today that the world appears to be moving on to a new phase of co-operation where community interests take the place, largely, of individual interests. This change would seem to be evolutionary and being evolutionary quite irresistible. This new spirit and method in medicine finds an eloquent apostle in Dr. Davis, who, in the closing paragraph of his book, *Dispensaries*, forecasts the future necessary relationship of the medical profession to co-operative medicine as follows:

"The medical profession must frankly face the changes which medical science is bringing upon medical practice. The leaders in the medical profession bear the responsibility of making the rank and file understand that there is now a scientific necessity for the co-operative provision of diagnostic equipment, and of facilities for reception and care of patients, and that there must consequently follow a large development of co-operative medical service through various forms of institutional organization. Individualism in medicine should continue, so far as it implies a sense of direct responsibility for the patient, but individualism must not be and cannot continue to be in antagonism to working as a part of an organization, with graded responsibilities established therein. We may be confident that whatever is

clearly demanded by the public interests as a whole should and will over-ride the special interests of any vocation or group; and also that there lies ahead of the medical profession a future of enlarged dignity and of more secure economic remuneration, if there is a broad community organization of the wonderful resources of medical science and of the skill of its representatives in the medical profession—an organization such as will render the very best of these resources accessible to all the people on a democratic basis. The great war is calling to everyone's attention the power of medicine to prevent disease among great masses of individuals whose countries were swept by pestilence, and to heal wounds and illness among the victims of the battlefields as these have never been healed before. The public will not fail to remember, however, that these wonders have been accomplished by organized rather than by individualistic medicine."

(3) One cannot help but view the present situation with greatest optimism. The process of readjustment appears to be going forward apace with economic forces, as usual, in the saddle. Doctors are coming more and more to see that the economies of organization will permit of a larger average remuneration for the medical man; that lowered cost and increased efficiency mean greater demand for medical service; that greater demand for medical service means greater per capita expenditures for such service; that it means the deflection of huge sums of money heretofore spent on patent medicines and drugs largely self-administered to the pockets of practicing physicians.

(4) Brilliant specialists and general practitioners will undoubtedly continue to hold sway with remunerative practice among the rich. In increasing measure they will, it would seem, give part time free to the poor as they have so generously done in the past. The incompetent doctors will continue to struggle along in the rear as incompetents in all human endeavor have done since time immemorial. They will continue to divide their time neither with the rich nor the poor, but just with themselves. The great body of sterling, capable physicians seem to be increasingly recognizing the fact that prosperity, congeniality, and stimulation attend closer affiliation with the expanding

mechanism of community medicine. The speed of this readjustment will depend on the efficiency with which the leaders in the community medicine movement develop its advantages, and the effectiveness of the educational campaign among doctors through which they may in increasing numbers learn to see where their permanent interests appear to lie.

X-Ray and Laboratory

Robert H. Lafferty, M. D., Dept. Editor.

In the localization of an organic non-opaque body in the bronchi the X-ray has heretofore been of little value. At the meeting of the Eastern Section of the American Roentgen Society in Atlantic City last January, Drs. Jackson, Spencer and Manges of Philadelphia presented a joint paper bearing on this. (Published in Am. Jour. of Roent., June, 1920.)

They report six cases. Dr. Spencer reported the physical findings; Dr. Manges, the Roentgenologic; and Dr. Jackson, the result of the bronchoscopy.

The characteristic roentgenographic findings Dr. Manges summarizes as follows:

"1. Increased transparency over the affected side.

"2. Depression of the diaphragm on the affected side.

"3. Displacement of the heart and mediastinal structures away from the affected side—in short an acute obstructive emphysema.

"4. Increased density of the lung shadows on opposite side due to retained secretions."

In the light of these observations Dr. Manges reviewed many of the recent cases and in all of them these observations were confirmed.

In the December, 1919, number of the Am. Jour. of Med. Sc. Diemer and Cramer have an article on Roentgenologic Determination of Pulmonary Tuberculosis. The following are some of the pertinent conclusions:

"1. The definite determination of pulmonary tuberculosis by means of roentgen study alone in practically every stage is possible. The stages and activity of the process are not as definitely established by roentgen study alone as by physical examination alone, but a

combination of both is decidedly more reliable than either alone.

"2. The stage of an excavation is readily determined.

"3. There are distinct roentgenologic pathognomonic indications of pulmonary tuberculosis.

"4. The exact involvement is more readily made out by roentgen study. Much assistance is furnished the clinician in regard to prognosis.

"5. Any abnormality found in the upper quadrants should prompt the roentgenologist to suggest the probability of tuberculosis unless definite indications of another process are certain."

In the Journal of the A. M. A. for June 26th, 1920, Terry of Nashville has outlined a method for preparing a satisfactory polychrome methylene blue for staining tissue freshly removed from the patient for the purpose of prompt pathological diagnosis according to the McCarty method used at the Mayo Clinic.

Hospitals and Sanatoriums

John Q. Myers, M. D., Department Editor

The following is a list of the members of the North Carolina Hospital Association:

Dr. James M. Parrott, Memorial Hospital, Kinston, N. C.

Dr. John Q. Myers, Tranquil Park Sanitarium, Charlotte, N. C.

Miss Elizabeth Ross Owen, Highsmith Hospital, Fayetteville, N. C.

Miss E. M. Davis, Edgecombe General Hospital, Tarboro, N. C.

Dr. W. L. Jackson, High Point Hospital, High Point, N. C.

Dr. L. A. Crowell, Lincoln Hospital, Lincolnton, N. C.

Dr. H. F. Long, Long's Sanatorium, Statesville, N. C.

Dr. Moir S. Martin, Martin Memorial Hospital, Mt. Airy, N. C.

Dr. E. B. Glenn, Meriwether Hospital, Asheville, N. C.

Dr. L. W. Kornegay, Rocky Mount Sanatorium, Rocky Mount, N. C.

Dr. John T. Burrus, High Point Hospital, High Point, N. C.

Dr. J. F. Highsmith, Highsmith Hospital, Fayetteville, N. C.

Dr. John P. Munroe, Charlotte Sanatorium, Charlotte, N. C.

Mrs. Walter Hughson, Grace Hospital, Morganton, N. C.

Miss Edith M. Redwine, Monroe, N. C.

Dr. B. C. Willis, Park View Hospital, Rocky Mount, N. C.

Dr. J. L. Nicholson, Fowle Memorial Hospital, Washington, N. C.

Dr. K. C. Moore, The Carolina General Hospital, Wilson, N. C.

Dr. E. L. Strickland, The Carolina General Hospital, Wilson, N. C.

Dr. I. T. Mann, High Point Hospital, High Point, N. C.

Miss C. E. McNichols, St. Peters Hospital, Charlotte, N. C.

Dr. J. A. Williams, St. Leo's Hospital, Greensboro, N. C.

Sister M. Raphael, Mercy Hospital, Charlotte, N. C.

Dr. P. R. Macfadyen, Concord Hospital, Concord, N. C.

Dr. J. P. Monroe, Carolina Central Hospital, Sanford, N. C.

Dr. L. B. McBrayer, State Hospital for Tuberculosis, Sanatorium, N. C.

Miss Gilbert Muse, High Point Hospital, High Point, N. C.

Dr. D. A. Garrison, Gaston County Sanatorium, Gastonia, N. C.

Dr. B. S. Herring, The Moore-Herring Hospital, Wilson, N. C.

Dr. W. H. Anderson, The Moore-Herring Hospital, Wilson, N. C.

Dr. C. A. Woodard, The Moore-Herring Hospital, Wilson, N. C.

Dr. James W. Davis, Carpenter-Davis Hospital, Statesville, N. C.

Dr. F. A. Carpenter, Carpenter-Davis Hospital, Statesville, N. C.

Dr. J. R. Parker, Rainey Hospital, Burlington, N. C.

Dr. C. E. Reitzel, High Point Hospital, High Point, N. C.

It is earnestly hoped that every hospital in the state may very soon have the name of a representative on the roster of members of the North Carolina Hospital Association.

Certainly it will be noted by a study of the above roster that the membership are those who stand for the very best in the hospitalization of our state's sick and when every other legitimate ethical institution in the state joins hands with this body and there follows united, harmonious co-operation, the "Old North State" may well be proud of her position among the leading states in the matter of high standards in general hospitalization.

Nurses Corner

Edith M. Redwine, R. N., Dept. Editor

104 Nurses For North Carolina.

The largest class of nurses in the history of North Carolina passed the examinations and were granted certificates of registration at the meeting of the Board of Examiners of Trained Nurses in Raleigh June 8-10.

The ten applicants making the highest grades in the entire examination, ten subjects, as announced by Miss Cain, are as follows: Sarah Lyle Spencer, with an average of 95.77; Lettye Merle Shoaf, 94.97; Martha Helena Burgess, 93.8; Lillian Ventress McCasky, 93.36; Bessie May Drumheller, 93.33; Julia Annie Hinkle, Huldah May Cox, Mary Myrtle Norton, Margaret Evelyn Winecuff and Dorothy Burroughs, all averaging above 92.

The names of the young ladies who will receive certificates to practice as professional nurses in North Carolina, with the training schools at which they studied, are as follows:

Charlotte Sanatorium—Gladys Augusta Henderson, Blossom Nash, Jessie Steel.

City Hospital, Gastonia—Pearl Davidson, Eva Riddle, Olivia Short.

City Memorial Hospital, Winston-Salem—E. Blanche Hauser, Dessie Hewitt, Nellie B. Oakley.

Clarence Barker Memorial, Biltmore—Sarah Lyle Spencer, Margaret Evelyn Winecuff.

Concord Hospital—Stella Marie Baker, Mrs. James McEachern, Jr.

Cumberland General—Mrs. Fannie Edge.

Dix Hill and Bellevue Hospitals—Mrs. Bessie Haley, Margaret Leota Keyes.

Edgecombe General—Thelma Elizabeth Lowe, Helen Margaret Spruill.

Fowle Memorial, Washington—Martha Helena Burgess, Alice Leora Collier.

Grace Hospital, Morganton—Ruth L. Clontz, Nannie L. DeVault.

Highland and Long Island College Hospitals—Virginia C. Cork.

High Point Hospital—Zulene Williams.

Highsmith Hospital, Fayetteville—Lucy A. Keeter.

James Walker Memorial, Wilmington—Ida J. Blake, Sula Augusta Boney, Nell Koons, Alice Sinclair, Mary Thrower.

Lincoln Hospital, Lincoln—Sarah Eliza Fullwood, Faye Lawrence.

Lincoln Hospital (colored)—Durham—Daisy Bell Teer, Helen King, Eula Mae Julia.

Long's Sanatorium, Statesville—Mabel Niblock, Mary E. Plyler, Bertha Beatrice Wallace, Nell Allen Phillips.

Mary Elizabeth Hospital, Raleigh—Sophia B. Lawrence, Beatrix Marie Ray.

Mercy Hospital, Charlotte—Katherine Moran, Sister Mary Xavier Roueche.

Meriwether, Asheville—Nora Margaret Ballew; Lucille Dalton, Bessie Drumheller, Jessie Wingo Jackson, S. Mildred Ritchie, Mary Ruth Rogers, Hattie Lexine Williams.

Mission Hospital, Asheville—Julia Annie Hinkle, Mary Myrtle Norton, Annie J. Reel.

Moore-Herring, Wilson—Lucy G. Leary, Thelma Elizabeth Lowe.

Morehead City Hospital—Bertha Elizabeth Latham.

Parrott Memorial, Kinston—Mrs. Lila May Bell, Nettie Mae Fulcher, Lillian Ventress McCaskey.

Park View Hospital, Rocky Mount—Julia Helen White.

Presbyterian Hospital, Charlotte—Ola Bostick, Georgia Broome, Minnie Jane Campbell, Kate Johnson, Mamie Irene Johnston, Marie C. Martens, Martha Hudson Moore, Montgomery Scarborough, Mary Thrower, Annie Prentiss Turrentine.

Pryor Hospital, Chester, S. C.—Bertha Elizabeth Stevenson.

Rex Hospital, Raleigh—Ruth Talmage Fuller, Sue Barksdale Gatewood, Daisy Skipper.

Rocky Mount Sanatorium—Dorothy Borrourghs, Ada E. Lee.

Spicer Sanatorium, Goldsboro—Valeira Justice, Sarah Elizabeth Waters.

St. Agnes (colored), Raleigh—Florance P. Jones.

State Hospital, S. C., and St. Elizabeth's Richmond—Frances Blanche Owens.

State Hospital, Morganton and St. Elizabeth's Richmond—Ocie Mae Kee-ter, Hattie B. Haigwood.

St. Leo's Greensboro—Lucile Adams, Etta Beverly, Gertrude Charity Dick, Mary Alice O'Brien, Sophia Rawline, Eva Thomas.

St. Luke's, New Bern—Annie E. Abernethy, Mary Louise Smith.

St. Peter's, Charlotte—Ella Mae Boyles, Mamie I. Gaddy, Mary E. Shutt.

Thompson Hospital, Lumberton—Blanche Melvin.

Watts Hospital, Durham—Julia Irene Mangum, Margaret M. McGuire, Nell Swain, Helen Ramsey Steel, Huldah May Cax.

Wesley Long Hospital, Greensboro—Elma B. Forkner, Annie Louise Lindley.

Whitehead-Stokes Sanatorium, Salisbury—Emma Randall Foster, Lottie Merie Shoaf, Martha Frances Smith.

Miss Sarah G. Currie, of Fayetteville, was detained on duty with a very ill patient and did not reach Raleigh for the first examinations. Miss Rebekah Fleetwood Redford, of Rex Hospital, was called away, because of the death of a sister, before the last examination was given. At the meeting of the board these will write on the subjects they did not take this time, and will then receive their certificates.

Certificates of reciprocity were granted to Misses Mabel S. Croft, Catherine Mackey, Katherine Masten, Tula R. Moose, all registered in Pennsylvania. Registered nurses from other states who were given certificates through recognition are: Misses Jane VanDe Vrede (director nursing service, A. R. C., southern division), Eleanor C. Cowan, Caroline Clarkson Moncure, Clara Reid, Marie Johana Sinclair, Mary Thelma Wilson, Ella M. Williams, Hazel May Witchey, Neomi Mohr, Essie Heritage, Alma A. Hardaway, Johnnie A. Dixon, L. Irma Bowman, Mary Louise Griffin, Mabel Perry Snyder, Eugene E. Herring and Katherine B. Myers.

Retiring members of the board are Miss Maria P. Allen, Grace Hospital, Morganton, president; Miss Edith M. Redwine, Monroe; Dr. James M. Parrott, Kinston. Remaining are Miss Effie Cain, Salisbury, North Carolina secretary-treasurer; Dr. C. F. Strosnider, Goldsboro. Newly elected members are Miss Mary P. Laxton, Biltmore Hospital, Biltmore; Miss Lois Toomer, Wilmington and Dr. Dan E. Sevier, Asheville.

Miss Margaret Goforth, a private duty nurse of Asheville, has recently announced her intention of sailing August 17, for Ying Tak, China, where she goes as a medical missionary from the First Baptist church of Asheville. Miss Goforth is a native of Western North Carolina and a graduate nurse of the

Meriwether Hospital and Training School for Nurses, Asheville. She has practiced her profession for several years and may well be said to belong to the type of nurse who makes "Service" her watchword and is well fitted for the work to which she is going.

With Miss Goforth will sail Dr. A. L. Thompkins and wife late of Fort Hancock but now of Kenilworth, United States Public Service Hospital, Biltmore. Dr. Thompkins will have charge of the hospital at Ying Tak, near Canton, recently built by the Baptist church.

GENERAL GORGAS DIES IN LONDON.

Major General William C. Gorgas, former Surgeon General of the United States Army, died in a London hospital July 4 as a result of nephritis.

About the middle of June it became evident that his recovery was virtually impossible, and for some days prior to his death he was comatose and unable to recognize either Mrs. Gorgas or Brigadier General Noble, who were the only Americans present at the end. Every facility was afforded by the British military authorities for proper medical attention.

General Gorgas arrived in London May 19 from New York in seemingly vigorous health and the next day with General Noble and Mrs. Gorgas left for Brussels where he was decorated by King Albert. From Brussels he went to Coblenz and returned to London May 29.

On the morning of May 30 he suffered a stroke of apoplexy, and was removed to Queen Alexandra Hospital, where his death occurred.

General Gorgas,—the man who made possible the Panama canal and the man of all others who has led in the worldwide fight for the eradication of yellow fever—had for his greatest ambition to write "The last chapter of Yellow Fever" and as is reported elsewhere in this issue it seems that his dream is coming to full realization.

Seed beds of this scourge that have not been free for many generations have been cleaned up and the disease seemingly eradicated.

May we quote the tribute of Secretary Baker to this wonderful man:

"The death of Major General Gorgas closes a career of great distinction. The works of General Gorgas in the canal zone made the completion of the canal

possible, and saved thousands of lives. It would be impossible even to estimate the lives saved by his subsequent pursuit of yellow fever prevention. His work has practically made an historic disease of what was once a virulent plague. Although a physician and scientist, General Gorgas was in every sense a soldier. Military men and military things had his sympathetic interest, and he carried over into his scientific and humanitarian pursuits the zeal and courage of the soldier. He was courteous, high minded, scholarly and zealous, and the withdrawal of his fine enthusiasm is a distinct loss to modern medicine, just as his great career is an inspiration to doctors and soldiers alike."

The Short and Catchy Proprietary Name.

A laborer went to a Brooklyn physician for treatment and was given three prescriptions. One of the prescriptions, according to the Food and Drug Bulletin of the Department of Health, City of New York, called for "Laxol," the word being written on a piece of blank paper without directions. The drug clerk misread the prescription and dispensed an "original bottle of "Lysol" which bore the usual poison label with skull and cross bones. The man drank the entire three ounces of Lysol and died half an hour later. The case is now in the hands of the district attorney, the drug clerk being held under \$10,000 bail. "Laxol," as our readers know, is castor oil sweetened with saccharin and flavored with peppermint. There is no excuse for prescribing the product. The official Aromatic Castor Oil (Ol. Ricin. Arom.) of the National Formulary would answer every purpose served by the proprietary preparation.—*Jour. A. M. A.*, May 29, 1920.

You have a shilling. I have a shilling. We swap. You have my shilling and I have yours. We are no better off. But suppose you have an idea and I have an idea. We swap. Now you have two ideas and I have two ideas. We have increased our stock of ideas 100 per cent.—*A. S. Gregg.*

Doctor, don't be so egotistical as to believe you can't be helped as well as helping others by supporting whole heartedly your local society and attending every meeting.

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THE N. C. BOARD OF MEDICAL EXAMINERS HOLD ANNUAL EXAMINATIONS.

The annual meeting of the N. C. Board of Medical Examiners was held in Raleigh, June 20-25, and at this meeting the newly elected board were present by invitation of the retiring board. The board elect effected their organization as follows:

President, Dr. L. A. Crowell, Lincoln-ton; secretary and treasurer, Dr. K. P. B. Bonner, Morehead City; Anatomy and Embryology, Dr. L. A. Crowell, Lincoln-ton; Chemistry, Hygiene and Physiology, Dr. W. M. Jones, Greensboro; Histology, Bacteriology and Pathology, Dr. C. A. Shore, Raleigh; Surgery, Dr. L. N. Glenn, Gastonia; Materia Medica, Therapeutics and Pharmacology, Dr. J. G. Murphy, Wilmington; Practice of Medicine, Dr. W. P. Holt, Duke; Obstetrics, Gynecology and Pediatrics, Dr. K. P. B. Bonner, Morehead City.

There were 50 applicants for license by reciprocity, 43 of whom were granted and 7 declined.

There were 25 second year students taking the preliminary examination, and 75 applicants for license by regular examination. Following is a list of successful candidates:

Three women are included in the list as follows: Ruth Wanstrom, of Asheville; Blanch Barrus, of Clinton, and Irene M. Morse, of Southern Pines.

William L. Wooten, of Wilson, is credited with the highest average, which was ninety-three and five-sevenths. L. B. Hill, of Asheville, is next with ninety-two and two-sevenths. The following are licensed on examination: E. R. Hipp, Charlotte; T. D. Sparrow, Washington; T. B. Henry, Wadesboro; W. C. Peterson, Jr., Wilmington; A. M. McKeithan, Brevard; John Harvey, Jr., Snow Hill; J. F. Owen, Mintz; W. E. Dawson, Pittsburgh, Pa.; J. H. Fitzgerald, Philadelphia; L. G. Ellis, Grover; E. C. Ford, Asheville; E. D. Woodward, Arapahoe; T. C. Lovelace, Henrietta; J. G. Lyerly, Granite Quarry; W. J. Borr, Currie; A. C. Banner, Mount Airy; R. C. Lyday, Brevard; L. B. Hill, Asheville; R. S. Davis, Wilmington; M. A. Hatcher, Calypso; J. L. Butler, Roseboro; G. B. Lynch, Fairview; W. T. Shaver, Badin; J. S. Woodruff, Charlotte; W. F. Martin, Leaksville; W. N. McDuffie, Biscoe; J. P. Rousseau, Winston-Salem; O. B. Bonner, Raleigh; J. C. Richardson, Monroe; F. P. Wooten, Kinston; W. I. Wooten, Wilson; J. W. Gibbon, Charlotte; G. W. Johnson, Wallace; J. M. Lee, Hopewell; W. E. Young (colored), Raleigh; Ben Gold, Shelby; R. E. Watkins, Henderson; J. W. Dickle, Asheville; C. T. John-

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heat depression—with its impairment of the appetite, digestive troubles, bowel disturbances, diarrheal disorders, nervous exhaustion, cardiac embarrassment and deranged functions—generally,—can be effectively relieved, and often prevented, by the use of

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Two to four teaspoonfuls in iced water or poured over cracked ice will not only greatly refresh invalid or convalescent patients to a gratifying degree, but its continued use will substantially increase the vital resistance. The effect on the appetite, digestion and assimilation, and prompt relief of nervous exhaustion, tell why so many physicians look on Gray's Glycerine Tonic Comp. as the ideal hot weather tonic.

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son, New York city; L. P. Martin, Scranton; C. O. Bristow, Wagram; V. E. Johnson, Rocky Mount; H. B. Moore, Philadelphia; C. C. Jones, Apex; C. F. Harris, Henderson; R. L. G. Keller, Dallas, Texas; E. J. Williams, Monroe; H. M. Vann, Wake Forest; J. H. Williams, Monroe; S. A. Thompson, Paterson, N. J.; Blanche J. Barrus, Clinton; G. L. Carrington, Durham; W. H. Bennett, Mooresville; T. Formy Duval, Bolton; C. E. Brown, Salisbury; R. B. Butt, Bakersville; Z. P. Mitchell, Windsor; R. B. McKnight, Charlotte; P. N. Neal, Raleigh; R. A. White, West Asheville; W. B. DeWar, Raleigh; W. B. Kinlaw, Rocky Mount; A. L. O'Brian, Timberlake; R. B. Rankin, Kannapolis; R. E. Brooks, Camden, N. J.; W. T. Harper, Wilmington; Z. B. V. Jones, Swan Quarter; E. W. Schoenheit, Asheville; J. K. Holloway, Raleigh; W. P. DeVane (colored), Bolton.

The following were licensed through reciprocity; George Alexander, Asheville; George F. Baier, West Asheville; Thomas Beath, Raleigh; James L. Blair, Gastonia; Thomas C. Bost, Charlotte; James F. Brewer, Asheville; H. W. Butler, Goldsboro; Silas A. Conduff, Asbury; Robert S. Crawford, Rutherfordton; Percy C. Cripps, Salisbury; John E. Daugherty, Winston-Salem; William B. Dudley, Winston-Salem; J. J. Everett, Asheville; L. C. Fisher, Roseboro; J. H. Hall, Woodsdale; Bruce Holding, Portsmouth, Va.; Howard M. Horton, Macon; Lynwood H. Justis, Littleton; Edwin J. Kehoe, Henderson; E. W. Larkin, Charleston; Jas. G. Lowry, Lowryville; Brockton R. Lyon, Greensboro; Edw. C. McClees, Elm City; K. E. Montgomery, Waynesville; Grady A. Morgan, Stocks ville; Irene M. Morse, Southern Pines; Hugo Muench, Windsor; Kemp P. Neal, Raleigh; George C. Pruitt, Monroe; Henry W. Quenn, Asheville; Carl E. Richardson, Pinehurst; Albert T. Russell, Wendell; E. H. Saniter, Charlotte; James E. Shuler, Durham; V. R. Small, Raleigh; W. C. Stireing, Winston-Salem; L. C. Todd, Charlotte; W. C. Verdery, Fayetteville; Ruth C. Wanstrom, Asheville; Harry H. Wilson, Black Mountain; K. J. Wilson, Florence; E. C. Holden, White Rock; O. B. Darden, Durham; George S. Harden, Burlington.

The Journal takes pride in calling the attention of the profession to the splendid work of the retiring board during the past six years. They have accom-

plished much toward raising to the top the standards of medical practice in North Carolina.

The United States has been made to realize that only competent well trained men are now given license in this state and thus having been assured of this, 43 states in the union accept for reciprocity a North Carolina certificate.

This is proof of a condition for which every doctor should feel proud and much credit for this belongs to the retiring board.

The incoming board have undertaken their work with a snap and vigor that gives every promise of carrying on to a fuller completion the plans begun. They are taking advantage of the experience of the old board and have invited them to join them in the considerations of the coming problems as they arise.

The Journal also wishes to use this opportunity of suggesting that we believe it would be a very great step along the lines of progress if instead of an entire board being elected every seven years, one member was elected each year at the annual meeting of the State Society to serve the seven years, and each in turn thus automatically becoming president of the board his last year of service. Such a system would make a sort of endless chain progression, would guarantee a man to serve as president who had had six years training and familiarity with the plans in process of evolution.

This is a subject which we wish to discuss more fully at an early date.

QUESTIONS FOR THE 1920 EXAMINATION OF THE NORTH CAROLINA BOARD OF MEDICAL EXAMINERS.

Practice of Medicine.

DR. JOHN Q. MYERS

1920

1. (a) Differentiate multiple neuritis (pseudo-tubes) and locomotor ataxia. b. Give the normal blood pressure in man, woman and child.

2. Describe four peculiar appearances of the tongue and give their significance in diagnosis.

3. Give approximately the normal amount of urine excreted in twenty-four hours and its specific gravity. How is it affected by acute nephritis, chronic interstitial nephritis, chronic parenchy-

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matous nephritis and diabetes mellitus?

4. Give the etiology and symptoms of arterio-sclerosis and state briefly what conditions of the heart, brain and kidney are produced by it.

5. Give the etiology symptoms and treatment of acute hyperthyroidism.

6. Give briefly the clinical symptoms of incipient tuberculosis.

7. What are the causes of secondary anemia? What is hemophilia?

8. a. What is lichen planus? b. Define uremia; glycosuria.

9. Give the symptoms of epidemic influenza and name its most common complications.

10. Give a synopsis of treatment of the different stages of syphilis.

Pharmacology, Materia Medica and Therapeutics

DR. JOHN Q. MYERS

1920

1. Give official name, composition and dose of (a) Fowler's solution (b) Donovan's solution; (c) paregoric; (d) Dover's power; (e) Basham's mixture.

2. Name three salts of potassium most used in medicine. Give dose of each.

3. Give the botanical name or digitalis. Name official preparations and dose of each.

4. Name the principal alkaloid of belladonna. Give dose and indications for its use.

5. Define: (a) diuretics; (b) diaphoretics; (c) emetics; (d) cathartics; (e) narcotics. Name a drug in each class.

6. Give the physiological action of opium. Name its most used alkaloids and dose of each.

7. Write a prescription of official drugs for the following: (a) neuralgia; (b) gastralgia; (c) cystitis; (d) acute bronchitis.

8. Give physiological action and therapeutic uses of: (a) ergot; (b) pituitary extract; (c) veratrum viride.

9. Define: (a) anaphylaxis; (b) antitoxin. Give dose and action of corpus luteum.

10. What is the therapeutic value of emetine? Its dose and method of administration.

Chemistry and Hygiene

DR. ISAAC M. TAYLOR

1920

1. Describe the ordinary urinometer. What does the scale denote? Rule for calculating total solids in urine from urinometer reading.

2. What is sulphuric ether chemically? Give formation and chemical formula for preparation.

3. Give a routine for examination of urine. How would you decide whether to examine further for glucose? Give a satisfactory test for albumen. Give a satisfactory test for indican.

4. In Fehling's test what is the composition of the precipitate when glucose is present?

5. Define an element; a compound; an alkaloid. What is a necessary element in organic compounds?

6. What is corrosive sublimate chemically and what is calomel chemically? Give a ready antidote for corrosive sublimate. On what does its action depend?

7. What is the chemical difference between grain alcohol and wood alcohol?

8. In a routine examination after a test meal, for what would you look? Give a qualitative test for each.

9. What condition would govern you in condemning a drinking water and if you found it only "suspicious," what would you do to render it potable?

10. What amount of air space is required for each person occupying a sleeping room? How frequently should the air be changed?

ANATOMY

DR. J. F. HIGHSMITH

1920

1. Describe the scapula and name the muscles attached thereto.

2. Describe the plantar fascia. Which is the more serious, suppurative in the sheath of the tendon of the flexor longus pollicis, or the sheath of the flexor tendons of the index, middle or ring finger?

3. Describe the pelvic portion of the ureter in the female. What is the relation of the ureter to the uterine artery?

4. Describe the common bile duct. Give its relation to the first portion of the duodenum.

5. Describe the mesentery.

6. Describe the thyroid gland, giving its anatomical relations and blood supply.

Quotations from Doctors: No. 4

"In cervicitis and its allied conditions, the best remedial agent, in my opinion, is



"It can be applied warm, on a wool tampon and packed in the vagina against the cervix, and supported lightly with a gauze dressing, held in place with a T-bandage. Care must be taken not to pack so tightly as to prevent drainage.

"Pruritis, from vaginal irritation, is alleviated within twenty-four hours by the application of Antiphlogistine. The osmotic and hygroscopic properties of this preparation, make it one of the best means of treating pelvic congestion."

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7. Describe briefly the middle meningeal artery and tell why we have pressure on the brain in hemorrhage from the vessel.

8. Locate the coeliac axis and name the nerves entering into its formation.

9. What anatomic parts are normally found in the left hypochondriac region?

10. Describe the structure of the prostate gland and give its anatomic relations.

PHYSIOLOGY, PATHOLOGY AND BACTERIOLOGY

DR. M. L. STEVENS

1920

1. Discuss the physiology of the blood with reference to the elements and properties involved in the spontaneous cessation of hemorrhage.

2. During sleep what changes if any take place in (a) respiration (b) heart action (c) blood pressure (d) eye balls and pupils (e) function of kidneys?

3. Briefly discuss fatigue (of human muscles): (a) giving one theory as to its cause; (b) naming the conditions under which the power of muscles to work is diminished; (c) the conditions under which the power to do work is increased; (d) the kind of food which most quickly increases the ability to do muscular work.

4. Name at least three types of "benign" and an equal number of "malignant" neoplasms.

5. (a) What features are concerned in the malignancy of a tumor? (b) How may a benign tumor seriously affect the well being or the life of the host?

6. Is the immunity resulting from anti-typhoid vaccine active or passive immunity? Explain briefly.

7. How do microorganisms produce injury to the body?

8. Formulate five or more rules which you would observe while doing clinical laboratory work in order to protect yourself and others against the possibility of infection from bacteriological cultures or other infectious material studied.

9. What use would you make of the following: autoclave, petri dish, haemocytometer, Gram's stain, Loeffler's blood serum.

10. Name the diseases caused by diplococci and the type of diplococcus responsible for each of the diseases mentioned.

Note.—A Laboratory Examination will also be given.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS

DR. EDWIN G. MOORE

1920

1. a__What structures compose the placenta and what function does it perform? b__Describe the method by which the fetus in utero is nourished. c__Mention one or more causes of death of fetus. How may it be recognized?

2. What is meant by puerperal infection? a__Clinically what types are recognized? b__What is the best preventive treatment? c__Outline the proper local and general treatment.

3. a__What is sterility and what are its chief pathological causes? b__What do you understand by viability? c__Under what circumstances is an operation for abortion justifiable? d__Describe the technique of the operation and the subsequent treatment.

4. How would you recognize a post-occiput presentation? State the method and management of delivery.

5. Give the treatment of placenta previa; postpartum hemorrhage; eclampsia; mammary abscess; fissured nipples.

6. State the differential diagnosis between pyelitis, salpingitis and appendicitis, and give the treatment for the first named disease.

7. What is amenorrhea? a__When is it physiological? b__When is it pathological? c__What is its treatment?

8. What are the signs and symptoms, prognosis and treatment of bronchopneumonia in a child twelve months of age.

9. In what respect does cholera infantum differ from other types of intestinal disorders and what is the appropriate treatment?

10. Write a formula for modified cow's milk, using whole milk as a basis, for a child six months old.

SURGERY

DR. H. A. ROYSTER

1920

1. Discuss the various glandular enlargements of the neck—their pathology and surgical indications.

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As vacation time arrives there is the usual occurrence of the common forms of dermatitis. The inevitable pain, distress and danger of complications that attend even the simplest attacks, call for prompt and painstaking treatment. The use of compresses kept constantly wet with Pond's Extract, full strength, will assure rapid and satisfactory relief from the itching, burning, swelling and discomfort that characterize ivy poisoning and similar forms of skin irritation.

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2. Differentiate acute pancreatitis, acute perforation of a duodenal ulcer, and acute intestinal obstruction.

3. How would you manage a dislocation of the shoulder with a fracture of the surgical neck of the humerus?

4. a.—Give the diagnosis and treatment of stone in the ureter. b.—Give the indications for operation in varicocele.

5. What are the indications and methods for suture of the peripheral nerves?

6. Describe the technique and findings in X-ray diagnosis of diseases of the stomach.

7. Discuss the etiology of empyema thoracis and outline the proper treatment.

8. Give the etiology and pathology of tetanus and describe the forms of treatment.

9. a.—What are the symptoms and treatment of iritis? b.—How would you distinguish between mastoiditis and deep furunculosis at the external auditory meatus?

10. Define: keloid, phimosis, encephalitis, spermatocele, pyuria, noma, actinomycosis, epiplocele, celiotomy, hygroma.

THE ROCKEFELLER FOUNDATION.

(Abstracts from the review of the past year's work of the Rockefeller Foundation by its president, George E. Vincent.)

In summarizing the year's work the first installment of the review says that during 1919 the Foundation participated in activities of public health and medical education in thirty-nine different governmental areas, in each case by invitation of and in co-operation with the local governments concerned.

Regarding the campaign for the eradication of yellow fever the review says, in part:

"To eradicate yellow fever from these seed-beds (Guayaquil in Ecuador, Merida in Yucatan, suspected areas in Venezuela, along the coasts of Brazil and along the west coast of Africa) is the high adventure upon which the Rockefeller Foundation embarked in 1918 under the leadership of General William C. Gorgas. The results so far have been substantial and encouraging."

The campaign for the eradication of yellow fever was based upon the discovery already made by Drs. Finlay Reed, Lazear and others in Cuba that yellow

fever is carried from one person to another by a female mosquito of the species known as *Stegomyia*.

On the Trail of the Yellow Fever Germ.

Other important extracts from the review follow:

"Until recently attempts to discover the organism which incites yellow fever had failed. How the *Stegomyia* mosquito goes about her work was fully understood, but just what she injects into her victims remained a mystery.

"Guayaquil was selected as the most favorable center for research. There cases of yellow fever were always available, and experienced physicians skillful in detecting them were at hand. The one man peculiarly fitted by natural abilities, training and experience to pursue the elusive organism was Dr. Hideyo Noguchi, bacteriologist of the Rockefeller Institute for Medical Research, who had made a special study of its near relative, the germ infectious jaundice.

"With the blood of patients who were in the early stages of the disease Noguchi infected guinea pigs. These fell ill, showing symptoms which resembled those of men suffering from yellow fever. The blood of the first group of guinea pigs was used to inoculate another group in which the same manifestations of disease duly appeared.

"Finally Noguchi was able to cultivate from the blood a minute, delicate, thread-like, spiral organism—half-way between a microscopic animal (microbe) and a microscopic plant (bacterium). To this he gave the name *Leptospira icteroides*—'slim spiral, the jaundice maker.'

Dr. Noguchi Prepares a Serum.

"Although Noguchi did not assert that he had discovered the inciting germ of yellow fever, and was careful to state that he wished to test his results at Guayaquil by further investigations in other places, especially in Merida, Yucatan, there is no doubt that he has made an enormously valuable contribution to the knowledge of the disease.

"Furthermore, his discovery of the slim spiral jaundice-maker enabled him to prepare a serum. This has been administered in a number of cases with apparently favorable effect. It seems more than likely that a means of identifying yellow fever has been found, and that the chances are good of substantially reducing the mortality of the disease which now ranges between forty and

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eighty-five per cent., and, furthermore, that a vaccine can be made which apparently protects non-immunes against infection.

"The average number of cases of yellow fever annually reported in Guayaquil for the years 1912-1918, inclusive, was 259. In 1918 the total reached 460. It was in November, 1918, that a representative of the International Health Board of the Rockefeller Foundation arrived in Guayaquil to organize a campaign of eradication. He came upon the scene when the disease was at its height. In December 88 new cases were recorded.

Local Authorities Co-operate.

"The attack was undertaken on the invitation of the authorities both of Ecuador and of Guayaquil, who left nothing undone to insure success. Officials were delegated to co-operate in the program. Special municipal ordinances were enacted and rigidly enforced to compel compliance with the measures which were recommended.

"Only one American was sent to Guayaquil to organize the staff, which was made up of Ecuadoreans, many of whom were experienced in yellow fever work. Within a short time more than a hundred men were recruited and assigned to their tasks.

"The campaign aimed at two things:

"1. The earliest discovery of cases of yellow fever which were to be promptly isolated and screened from mosquitoes, and

"2. The elimination of the *Stegomyia* by denying the females access to water in which to deposit their eggs.

"It was the peculiar condition of the public water supply which presented the chief problem. The hydrants of Guayaquil flow only an hour and a half in twenty-four. The well-to-do have tanks on the upper floors of their houses; the less fortunate store water in barrels, cans and other containers.

"These conditions were ideal for the breeding of the *Stegomyia*. It was not difficult to screen the tanks or to protect barrels with wooden covers.

Minnows Mobilized for the Fight.

"There remained a good many open receptacles which it was hard to protect. Resort was had to the experiment of recruiting fish to live in these containers and to eat the mosquito eggs as fast as they were deposited. The first kind of fish tried was a disappointment. It was

nervous, easily frightened and short-lived.

"A hardy fish was next drafted, but this turned out to be so vigorous that it was always jumping out of the water. Finally a satisfactory fish was discovered. It ate larvae gluttonously and darted to the bottom of the barrel whenever the surface of the water was disturbed. Thus, by a variety of attacks—drainage, filling, oiling, screening, and the mobilizing of minnows, the *Stegomyia* was baffled.

"By early January, 1919, the control work was far advanced. Here are the figures for successive months: January, 85 cases; February, 43; March, 17; April, 3; May, 2; June, 0. Since that time no case has been reported.

It is too early to affirm that yellow fever has been completely eradicated from Guayaquil. Vigilance will not be relaxed for a year at least. Nevertheless, the possibilities of control have been convincingly demonstrated. Guayaquil, the chief seed-bed of yellow fever, has been free from the disease for months. The public has proclaimed its deliverance from a menace which had never been absent since 1842. General Gorgas's ambition to write "The Last Chapter of Yellow Fever" seems no utopian dream.

A League of Nations for Health.

"In July, 1918, an outbreak in Guatemala had been reported. By quarantine isolation of cases and anti-mosquito measures the epidemic was brought under control before the end of the year. Later the disease appeared in Honduras, Salvador and Nicaragua.

"Offers of assistance were warmly welcomed by the governments of these countries, and the Foundation promptly dispatched a group of experts headed by General Gorgas. In each country a special government commission was created to take charge of control measures. The body was composed of local physicians and sanitarians, with one representative of the International Health Board of the Rockefeller Foundation. Each country provided at least a part of the cost of control.

"The Foundation contributed the services of its expert staff members, and made additional appropriations toward the common budgets. These several commissions co-operated in an international program for the protection of all the areas concerned. It was a practical

League of Nations on a small scale and for a specific object. The plan was carried out energetically and thoroughly to such purpose that by the middle of October yellow fever had been practically banished from Central America.

To Guard Against Further Outbreak.

"The commissions are being continued in authority, and concerted efforts will be made during 1920 to guard against another outbreak. The governments of Nicaragua, Salvador, Guatemala and Honduras have agreed to control Stegomyia mosquito breeding in all ports, to require daily inspection of ships which touch at Pacific ports, to discover whether there are Stegomyia breeding places on board, and to maintain a six-day quarantine against all travelers from southern Mexico until yellow fever has been eliminated from that country.

"With Guayaquil free from fever and with Central America protected, a good start has been made upon the world-wide project of extirpation. Plans for the early future include the sending of commissions to Peru, where yellow fever appeared during the latter part of 1919, and, with the active co-operation of the British Government, to the suspected area on the west coast of Africa. It is hoped also that a way will be found to banish yellow fever from southern Mexico. The league is widening its membership and is going confidently forward."

Typhoid Reduction in South Carolina.

Comparative results in counties with and without organizations are given by L. A. Riser, Columbia, S. C. (Journal A. M. A., June 12, 1920). Each county in which this work has been done for two years has shown a decided decrease in typhoid. The reduction of typhoid fever is largely a matter of education. The building of privies alone will not check typhoid entirely, but will reduce it. If this disease can be so materially reduced by education, it would seem that all other diseases of which the cause is known could be reduced in a similar way. A county health organization is necessary, as one physician or nurse without assistance is not adequate for the supervision of the health conditions of a whole county.

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though primarily a symptom, will, if allowed to continue, soon depress or disturb every function of the body.

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who was noted for the pithy nature of his remarks, once said, "The lips of the wise disperse knowledge."

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The State Hospital for Insane at Morganton, N. C., has recently experienced a mild epidemic of small-pox, continuing for several weeks and infecting slightly in excess of four per cent of the patients and employees. Prompt vaccination in the early days of the epidemic was resorted to, but the almost complete failure of the vaccine secured from a well-known and widely advertised Eastern firm, permitted the development of a far larger number of cases.

Physicians and citizens of Raleigh, N. C., headed by a committee of Drs. H. A. Royster, John C. Wright, J. W. McGee, H. B. Haywood, Z. M. Caviness, have recently secured more than \$100,000.00 for betterments to Rex Hospital.

The daily press last month reported a few cases of typhus fever in Kings Mountain and vicinity, but the investigation by health officials does not appear to have either located the possible source of infection or have fully confirmed the diagnosis.

A physician of Raleigh, N. C., and one also at Asheville, N. C., suffered the misfortune to run over a child with his automobile with fatal results during the week of June 12.

The N. C. State Board of Health has issued a circular letter to all state institutions advising the inspection score card of the board for state institutions will carry an item relative to both small-pox and typhoid vaccination, which will either enhance or diminish the health grade of all institutions.

Third Case of Bubonic Plague at Pensacola.

Pensacola, Fla., June 18.—The third case of what was declared to be bubonic plague developed here today, the victim being a negro residing in the western part of the city. The Florida State Board of Health held a special meeting late today and arranged to take charge of the local situation, co-operating with the city and the United States Public Health Service officials.

Friends of Dr. David Rudisill, of Lincolnton, will be interested to hear that he is going abroad. The Lincolnton Times says: "Friends in Lincolnton of

Dr. David Rudisill will be interested to learn that he sailed yesterday from New York for Europe, where he will spend two months or longer. Dr. Rudisill is a son of Mr. and Mrs. J. H. Rudisill of this city."

The "T. B. Shrapnel."

From South Carolina comes the latest association publication, the "T. B. Shrapnel," organ of the South Carolina Tuberculosis Association, of which Mr. Philip B. Warner is executive secretary. It will be issued monthly and will contain national as well as local facts regarding the treatment, cure and prevention of tuberculosis. Copies will be sent free of charge to any one desiring them.

"The Next to Go!" is the title of a novel four-page leaflet being distributed by the Bureau of Tuberculosis of the North Carolina State Board of Health, Sanatorium, N. C. Unusually interesting statistics regarding the mortality from tuberculosis and the chances of recovery, appear on the inside pages, as part of a cut of the two-page chart designed last year by Mr. W. D. Thurber, of the Illinois Tuberculosis Association, for the Christmas seal trade.

Negro Health Week.

A "Negro Health Week" was recently conducted by the Texas Public Health Association, Austin, Tex., throughout the entire state. Each day of the week given to the campaign was devoted to a particular phase of public health work, with an unusually interesting program as the result.

The work began with a "Health Sunday," which was followed by "Personal Hygiene Day," "School Sanitation Day," "Swat the Fly Day," "Tuberculosis Day," and "Children's Health Day." The last day of the "Health Week" was given over to a "General Clean-up Day."

School for Colored Nurses.

The first class of graduates from the Piedmont Training School for Colored Nurses, opened in April, 1918, will be ready this month to take up the work of combatting tuberculosis among the negroes. The school is conducted as a part of Piedmont Sanatorium, under the auspices of the Virginia State Board of Health, and the same diploma is given the colored nurses as that received by white nurses at other training schools in the state.

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The Robeson County Medical Society met in Lumberton May 20, 1920, with 24 members present. Papers were read by Drs. R. S. Beam; E. R. Hardin, and J. A. Martin.

In the afternoon a picture was shown and a lecture given by the State Board of Health on gonorrhea and syphilis, and a clinic along this line held in Dr. Johnson's office.

We meet every two months, and always have interesting meetings and a good attendance.

Our next meeting will be held in Rowland in July.

I hope our society will give the Journal its hearty support, and shall bring the subject before them at our next meeting.

Yours very truly,

James A. Martin,

Sec. Robeson County Med. Society.

The Robeson County Society is certainly one of the live societies of the State, although not so large as some. They use neat up-to-date stationery showing names of officers in a real business like way. Every doctor in the county is a paid up member, meetings are well attended and the general atmosphere indicates a live bunch of men. —(Ed.)

The American Medical Directory: Co-operation Desired.

In 1905, after careful consideration, the Board of Trustees recommended, and the House of Delegates of the American Medical Association approved, the publication of a medical directory, in the belief that such publication would be in the interest of the medical profession. Since that time six editions of the Directory have been issued, and though this has been done at a financial loss, the undertaking has been generally regarded with satisfaction as one of the altruistic enterprises of the Association. At the present time the Seventh Edition is in course of compilation, but under most extreme difficulties. While the price of paper has doubled since the last edition was published, and the labor wage has more than doubled in the last five years, thus enormously increasing the expense, the difficulties to which we refer are not financial. To obtain and classify the data requires a large number of skilled clerical workers. And right here is our difficulty: skilled clerical workers are almost unobtainable at any price, and, in fact, it is impossible to get

sufficient ordinary clerical help. This difficulty can be overcome, in part at least, if physicians who receive circulars from our Directory department will promptly respond to the request for data concerning themselves. In most instances this means simply filling out the blanks clearly and returning them. Further aid will be rendered if physicians who have moved during the last two years, or whose names are not correctly listed in the Directory will send corrections at once. We make no apology for this appeal for co-operation because the Directory belongs to the members of the medical profession; it is their Directory. If they co-operate in the manner requested, the difficulties under which the new edition is being issued will be largely removed.—Jour. A. M. A., June 5, 1920.

NEW HOSPITAL FOR CRIPPLED CHILDREN AT ASHEVILLE, N. C.

Announcement is made that Fred L. Seely, proprietor of Grove Park Inn, will establish a children's hospital for cripples to which will be welcomed all white crippled children from any section of the country.

The hospital will be open with 30 beds and will be located on a wooded knoll a few hundred yards northeast of Grove Park Inn, near the site on which the government training camp was held in 1914.

It will cost \$45,000 to be erected, the announcement says and work will begin at once, the building to be rushed to completion as fast as it is consistent to do good work. A dormitory and administration building will be erected and the general architecture scheme will closely follow that carried out in the Biltmore industries building which is only a short distance from the site of the proposed hospital.

The hospital will be in charge of a staff of local doctors and surgeons of which Dr. W. I. Pinkey Herbert will be chief and each of the members of the staff will give their work free of charge. It is stated that while the hospital will start with 30 beds it will probably be increased as the need for such an institution grows. As it is, it is felt that the hospital will soon be filled after opening owing to the fact that it will accept cases from any section. It is the plan that just as soon as one bed is empty, one case is cured, that another patient will be admitted.



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Mr. Seely states that he will support the hospital and that no funds will be solicited for its upkeep. The details of the building will soon be worked out and the actual work of construction started.

Book Notices

All new publications sent to the Journal will be appreciated and will hereafter be promptly acknowledged under the heading of "Publications Received." It will be the aim of the Journal to review as many of the books received as possible, yet the Editor must be guided by the space available and the merit and appropriateness of respective publications. We want our readers to know about new publications that might be to them helpful and interesting.

"Diseases of the Intestines and Lower Alimentary Tract," by Anthony Bassler, M. D., Professor of Gastro Enterology, —Fordham University and New York Polyclinic, —Author of "Diseases of the Stomach and Upper Alimentary Tract," etc.; 660 pages, 154 text engravings and 62 full page half tone plates. F. A. Davis Co., publishers, Philadelphia. Price \$7.00.

A survey of the chapter headings impresses one with the broad scope of the work and how completely it is covered. Then as the subject matter of each chapter is studied one is pleased to see how the author takes up first the topographical and histological anatomy and continues with the exposition of his subject in a most clear and concise manner.

The interrogation of the patient, the ability of the history taker to discern and marshal salient points and reject those which are superfluous, is of the greatest value in gastro-intestinal conditions. The author realizing this has taken pains to discuss this phase in a very practical manner, calling especial attention to the important thing to be noted.

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Hypodermic use is preferable in severe cases. 20 to 40 minims every three or four hours, full strength deep in the gluteal muscles, until general improvement is noted.

Write for interesting data on the effective dosage of iodine

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The free and liberal use of illustrations all the way through adds greatly in conveying clearly the author's ideas.

"Dermatology," by J. Darier, physician to the Hospital Saint-Louis, member of the Academy of Medicine, Paris. Authorized translation from the second French edition, edited with notes by S. Pollitzer, New York, ex-president of the American Dermatological Society, corresponding member of the French Society of Dermatology and Syphilography, etc.; 770 pages, illustrated with 204 engravings and 4 colored plates. Lea & Febiger, Philadelphia and New York. Price \$8.50.

In preparing this second edition the author has retained the general plan of the first edition but after rewriting many paragraphs and the addition of more or less extensive elaboration. Especially is this true of the anaphylaxis,

phagedena, the sarcoids, the gangrenes, the cutaneous atrophies, and the dermatomycoses. Considerable space is allotted to the serodiagnosis of syphilis and its treatment with the arsenoben-zols. In the therapeutic notes the author has made them practical and calls attention to errors to be avoided.

An author obviously will cite the literature with which he is most familiar and which is most accessible to his readers, so that the reader of this work may expect to find a preponderance of reference to the achievements of French dermatologists. This characteristic, however, which is common to authors of any nation, is of decided advantage, for thereby the reader in studying the work of a foreign author acquires a broader outlook on his specialty.

"Symptoms in the Diagnosis of Disease," by Hobart Amory Hare, M.D., B.Sc., Professor of Therapeutics and Diagnosis, Jefferson Medical College; author of "Practical Therapeutics," "Practice of Medicine," etc. Eighth edition, thoroughly revised, 560 pages, 195 engravings and 9 plates. Lea & Febiger, Philadelphia and New York. Price \$6.00.

The author in his characteristic practical way argues that the well trained physician carefully notes the symptoms, gives to each its proper value, and, if need be, makes his laboratory investigation afterward. Laboratory diagnosis he leaves to special books for its adequate description and lays special emphasis on symptomology, being essentially devoted to a discussion of plans whereby a recognition of symptoms will lead to a diagnosis, which then can be verified if need be by laboratory specialist.

It is a work of intense practical help to the man whose environment makes it necessary for him to sometimes rely for a diagnosis on reason and judgment rather than test tube and microscope.

"A Diabetic Manual" for the mutual use of doctor and patient by Elliott P. Joslin, M.D., Assistant Professor of Medicine, Harvard Medical School, etc., Second Edition, thoroughly revised; 190 pages, illustrated. Lea & Febiger, Philadelphia and New York. Price \$1.75.

The title page says:

"To help make the home safe for the diabetic is the object of this book," and

this book was revised, simplified and condensed with the renewed purpose to make it serve as a text book for the physician to use in the education of his diabetic patients. The author says: "Those of my patients who are the most intelligent and those who understand the disease the best live longest." "Johns Hopkins Hospital Reports."

This volume, XIX, of the Johns Hopkins Hospital Reports contains most elaborate discussion with abundant illustrations of:

1. "The Structure of Normal Fibers of Purkinje in the Adult Human Heart and Their Pathological Alterations in Syphilitic Myocarditis," by O. Van Der Stricht and T. Wingate Todd.

2. "The Operative Story of Goitre. The Author's Operation," by William S. Halstead.

3. "Study of Arterio-Venous Fistula with an Analysis of 447 Cases," by Curle L. Callander.

Archives of Surgery.

For a number of years the proposal to publish a high-class journal devoted to surgery has been before the Board of Trustees of the American Medical Association. The final decision to publish such a journal has been delayed from time to time, partly because of the war, and partly because some believed there was no real need for a surgical journal. But criticism has been advanced that American surgery is not developing symmetrically, that the technical side—operative surgery—has been highly developed at the expense of the investigative and philosophical sides, and that there is a real need for a journal to represent these phases of surgery as a science. The Board of Trustees finally decided to publish such a journal, and the action of the trustees was approved by the House of Delegates at the New Orleans meeting. At the outset it will be issued bimonthly. Papers dealing with experimental work will be accepted and space allowed for protocols which have a direct bearing on, or an explanatory relation to, the problem considered. Articles will be welcomed which deal with clinical research in the hope of stimulating more careful and closer clinical examination. The value of laboratory methods has been rightly emphasized, but unfortunately in many instances to such an extent that the ability and desire to make close clinical observations

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have been lessened or lost. The value of monographic publication cannot be denied, and whenever a monograph is of sufficient value an entire number, if necessary, will be given to it. In a word, this new journal—Archives of Surgery—will be devoted to the advancement of American surgery, in the same way as the other special journals published by the American Medical Association are devoted to the advancement of the specialties they represent: Internal Medicine, Diseases of Children, Neurology and Psychiatry, and Dermatology and Syphilology. The personnel of the editorial board consists of Dr. Hugh Cabot, professor of surgery, University of Michigan, Ann Arbor; Dr. Thomas Cullen, professor of gynecology, Johns Hopkins University, Baltimore, Maryland; Dr. William Darrach, professor of surgery, Columbia University College of Physicians and Surgeons, New York

City; Dr. Evarts A. Graham, professor of surgery, Washington University, St. Louis, Missouri; Dr. Dean D. Lewis, professor of surgery, Rush Medical College, Chicago, and Dr. W. J. Mayo, the Mayo Clinic, Rochester, Minn. The positions in American surgery of the group of men who have accepted the responsibility for the editorial standard of the new journal will indicate its scientific scope and character. Coming from the press of the American Medical Association it is unnecessary to say that it will be, mechanically and typographically, equal to any similar publication in any language. This will especially apply to the illustrations: drawings, photomicrographs, half-tones, in color or in black and white, will be liberally used. The first number will appear, July 1.—*Jour. A. M. A.*, June 12, 1920.

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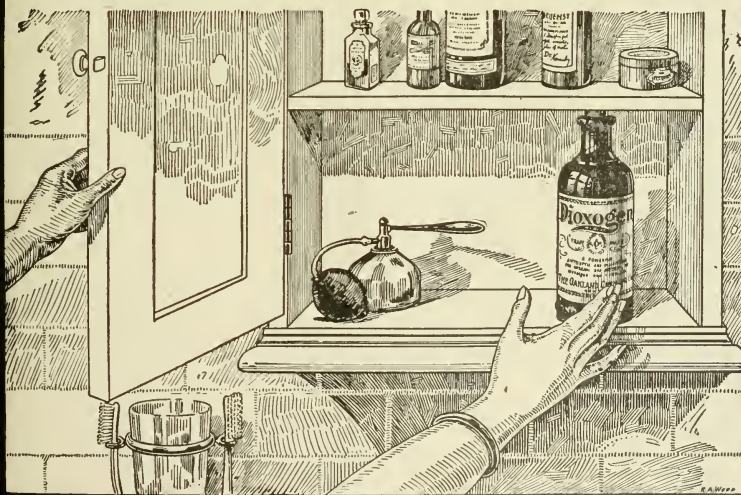
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Original Communications

ECLAMPSIA—EARLY DIAGNOSIS AND TREATMENT.

James A. Martin, M. D., Lumberton, N. C.

Eclampsia is defined as an acute toxemia occurring in the pregnant, parturient, or puerperal woman, and is usually attended by convulsions during which there is loss of consciousness, followed by prolonged coma. This is one of the most dangerous complications that may befall the pregnant woman. And there is no condition that more thoroughly tests the mettle and worth of the attending physician than does the manner in which he handles a case of impending or actual attack of eclampsia.

Statistics shows us that eclampsia occurs about once in every 500 labors. It also shows us that the mortality is from 20 to 45 per cent for the mother and 30 to 60 per cent for the child. Therefore, it behooves us as general practitioners to give the pregnant woman our very best and most careful attention and ever be on our guard against this most dreaded condition that has such high mortality for both the mother and child.

The most important thing in the treatment of eclampsia is an early diagnosis. We have many important symptoms—danger signals I will call them—of impending, or threatened, eclampsia that are often unheeded by the average physician.

There are many theories as to the cause of eclampsia, but as yet we are still groping blindly for the actual source of the intoxication or toxemia that brings on an attack. And generally speaking I think that too much stress is laid on the condition of the kidney (Nephritis in other words) as a cause of eclampsia to the exclusion of other and more important causes. For instance, according to authority, there is one organ that is always affected in

eclampsia either primarily or secondarily—namely the liver—while the kidney may or may not be affected.

When engaged to attend a woman expecting confinement we all make, or should make, regular routine examination of the urine every two to three weeks. And should we find albumen the case should be treated just like every other case of nephritis. But we should bear in mind that some of the most dangerous types of eclampsia are seen where albumen is never found. The finding of albumen in conjunction with other symptoms means a great deal, but alone means nothing more than any other case of nephritis (but of course the nephritis demands prompt and energetic treatment). In conjunction with other symptoms as persistent headache, drowsiness, vertigo, and a gradual and steady rise in blood pressure it means danger. But even then I consider that it is acting more as a safety valve for the system and the fact that albumen is found only goes to prove that there is a faulty relation existing between the mother and child and that the kidney is being over worked by nature in its effort to relieve the mother of pent up toxins, that mean danger to her. The point I would make right here is: don't abuse the kidney (which is already being overworked) too severely by directing the bulwark of your treatment against it, because you happen to find albumen, but look further for a deeper and more serious underlying cause.

One of the most important aids in the early diagnosis of threatened eclampsia is regular routine taking of blood pressure. I consider this of much more importance than urinalysis. Of course I realize that this is not always possible for the general practitioner to do. But it is well to do it in every case of pregnancy, and should certainly be done if you have had the least cause to suspect threatened eclampsia. It should be taken at intervals of from one to three weeks, (depending of course on the case) and if you should note a gradual and steady rise of from 5 to 10

*Read before the Robeson County Medical Society May 20th, 1920.

points every two weeks you had better get busy and start your treatment and not wait to find albumen. And I would start my treatment promptly if the blood pressure reached as high as 150.

For the treatment of threatened eclampsia: Put your patient to bed and insist on absolute quiet. Give bromides if necessary; a milk diet; and plenty of Epsom Salts—I mean 'till you have free catharsis. If patient is jaundiced give broken doses of calomel and repeat 'till jaundice clears up. Compound Jalap powder one drachm night and morning often proves well.

If in spite of your treatment your symptoms persist or gradually grow worse; there is only one thing to do and that is to terminate pregnancy it matters not at what stage whether it be four months or nine months.

As to the method of termination: If the symptoms are not too severe I would suggest packing the cervix and by gradual dilation induce labor. But if the symptoms are alarming and the child is viable, I think the safest method for both mother and child is Caesarian section.

Now as to the symptoms and treatment of an actual attack of eclampsia: The symptoms I will not attempt to describe for those we very well know. But just a few words as to the treatment:

First I wish to mention one drug that is used a great deal in eclampsia only to condemn its indiscriminate use and that is veratrum viride. Personally I do not use it and do not believe that it has any place in obstetrics. Certainly it should never be used unless the blood pressure has first been taken and found to be alarmingly high, or in other words you find apoplectic symptoms. And even then I think it is far better to bleed your patient than to give veratrum in such heroic doses as this condition calls for. In the first place veratrum is contraindicated in all conditions of depression or exhaustion, and if vomiting is feared. And in eclampsia these are some of the very conditions we are trying to guard against. Therefore I believe that in using veratrum you are only masking your symptoms, wasting time, and thereby lessening the chances of saving the mother and child. In any case where you think veratrum is indicated I think it is far better and safer to bleed your patient than to use the

drug. In a great many cases where veratrum is used I think the patient recovers in spite of its use and not on account of it.

When called to treat an actual attack of eclampsia the first thing that should be done is to quiet the patient with one fourth grain of morphine hypo, if necessary. Then the blood pressure should be taken and if found to be high, say as high as 165 or 175 the patient should be bled, but unless it is found to be as high as 160 I would not bleed. To my mind there is only one safe and sane thing to do and that is to empty that uterus as quickly as possible, and usually the safest way is by the Caesarian section. I will modify this by one exception and that is if on examination (under strict asepsis of course) you find the cervix fully dilated, or if the cervix is effaced, shortened, taken up, so that only the thin edge remains, and it can be dilated with the fingers, then I think you are justified in using forceps, otherwise I think we should insist on the patient going to a hospital and having a Caesarian section performed. Now if there is serious objection on the part of the family to Caesarian section or if you are far removed from a hospital I realize that you must then do the best you can under the circumstances. And in an event like this, if you have no signs of labor, or if the cervix is long and hard and no signs of dilation I think, generally speaking, it is better for the general practitioner to treat the symptoms and wait for labor than to attempt forceful dilation with instruments and rapid delivery with forceps, for as a rule medicinal treatment is far safer in the hands of the average physician than surgical interference.

In conclusion I would sum up by saying:

1. In guarding against eclampsia make routine examination of the urine every two weeks, but do not lay too much stress on your negative findings, or be too severe in your treatment against the kidney, if you should find albumen.
2. Take the blood pressure as regularly as possible, for it means much.
3. Do not use veratrum, for it has no place in obstetrics.

4. In every case of actual eclampsia empty the uterus as quickly as possible and preferably by Caeseran section.

I do not claim the above method of diagnosis and treatment of eclampsia to be perfect by any means, but have merely given you my own personal opinion, and you can take it for what it is worth.

THE TREATMENT OF CHRONIC GASTRITIS.

George M. Niles, M. D., Atlanta.

There are certain chronic dyspeptics who are sometimes a bane to their medical advisors, but who are entitled to patient and sympathetic consideration, nevertheless.

These sufferers from long-standing indigestion have in many instances run the gamut of surgical endeavor; have had appendices removed, gall-bladders drained, teeth extracted, ovaries and tubes extirpated, tonsils taken out, and so on, but they refuse to be comforted. Roentgen examinations show no organic pathology of the abdominal viscera, the heart, kidneys and lungs are functioning in a fairly normal manner, and by all rules of "the game" these individuals should be happy and chipper, instead of being imbued with gloom and melancholy.

Let me suggest the frequent complicating presence of a chronic gastritis with its train of anorexia, morning nausea, indefinite epigastric discomfort, occasional vomiting of glairy mucus, a sense of abdominal bloating and, overshadowing it all, a pessimistic viewpoint through which permeate but few rays of spiritual sunshine—this is the picture, varied in some particulars, but true to form in the main. In other words, a chronic gastritis, while not necessarily the underlying cause of the trouble, may by its presence produce such discomfort and distress, that, regardless of other, and perhaps more serious conditions, any methods to relieve the actual gastritis will be worth while.

The main features of treatment will be discussed, attempting to note the various modifications incident to the presence of increased, diminished, or deficient acid and other gastric juices.

Treatment may be divided into: (1) Prophylaxis. (2) Hygiene. (3) Local treatment of the stomach. (4) Diet. (5) Medication, and perhaps (6) Mineral springs.

In border line cases the general principles applying to hyperchlorhydria may be applied with safety until a definite diagnosis is reached.

Prophylaxis.—This is probably the most important, and consists in the correction of all causes contributory or aggravating, that may be apparent in connection with the gastric catarrh. Dietetic errors must be inquired into, and both regularity and uniformity of the meals enjoined. Some patients claim that their dietetic and other habits are already correct, but if the physician will have them keep for several days a written memorandum of every article eaten and every daily act, there will generally be found some information which can be acted upon with advantage. Deliberate eating, adequate mastication, and thorough insalivation should be insisted upon, and it is well that the physician should personally see to it that the teeth are in such condition that good mastication may be performed without discomfort. Should Rigg's disease, or pyorrhea alveolaris, be present, the physician should be slow to promise much improvement until this very important contributory irritation is abated. Catarrhal states of the post-nasal cavities should also be investigated and cared for, and tonsillar or pharyngeal disease should receive appropriate attention. Pathologic conditions of the tonsils with their potency for evil are now being accepted at their true value.

Cardiac disease, especially with failing compensation, should be properly treated; likewise diseases of the liver and kidneys, so as to lessen the liability to secondary gastritis.

Moderate smoking is not injurious as a general rule, but chewing tobacco, especially black tobacco, or that which is sweetened, is quite harmful, and should be prohibited. Should the "cathartic habit" be indulged in to an inordinate extent, this too, should be regulated, and evacuations of the bowels be accomplished by harmless means.

Hygiene.—A favorable mental attitude should be sought during meal-times, so as to promote the benign and helpful influences of the psychic aids to

digestion. If practicable, a rest, or a brief season of bodily and mental quietude should be enjoyed directly after meals, and the body should be strengthened by properly directed exercise. The ventilation of both the living and sleeping rooms is worth investigating, and when convenient, a change of climate, environment, or even occupation may be of assistance in the treatment.

Local Measures of Treatment.—The removal of excessive mucus and the soothing of the irritated gastric mucosa are of equal importance.

One or more glasses of hot water, drunk upon rising, dissolves and washes into the intestine some of this mucus. Alkaline medicines, also, dissolve the mucus to a certain extent, though not as much as some enthusiastic writers have claimed.

Lavage.—In no pathologic condition will more satisfactory results be obtained than by the proper and careful use of lavage in chronic catarrhal gastritis. Indiscriminately employed, it becomes harmful, and by its unskillful and injudicious application, lavage has been made the object of criticism in many quarters.

The chief indication for lavage in gastritis is the presence of mucus in such excess that it envelopes the food, prevents its saturation by the gastric juices, and impedes the orderly evacuation of the stomach. The custom of washing every stomach in which small amounts of mucus are found, is rapidly passing away. It should be remembered that a thin mucous coating of the lining of the stomach is a protection against irritating food and gastric juice of heightened acidity, and with all this washed away, the stomach is more susceptible to pathologic influences.

Frequency of Lavage.—Once daily is sufficient, unless there is also stagnation and fermentation, in which event the mucus may be washed out in the morning, and the fermenting mass be washed out again as near as possible to the hour for retiring. Daily lavage should not be kept up long, and, where this procedure must be continued for several months, two or three times weekly is an ample sufficiency. So far as practicable, the lavage should be performed with the stomach free from food, and, if required to clean that viscus, the patient should assume both the standing

and sitting positions while the operation proceeds.

The solutions employed are various, depending on the condition of the stomach and the sensations of the patient. It is well to first wash out the stomach with plain warm water, and then follow with the medicament. The following may be used: 1-grain tablets of potassium permanganate dissolved in 1 pint of water, sodium bicarbonate, sodium chlorid, silver nitrate, 5 grains to the pint of water, calcined magnesia, ichthyol, or boric acid. In those of a constipated habit, I sometimes leave a small amount of water containing a heaping teaspoonful of the calcined magnesia in the stomach.

Electricity.—Except in cases with marked atony or dilatation, electricity exerts but little if any tangible benefit. In nervous individuals, however, it may possess some psychic effect. The same may be said concerning vibratory massage.

Diet.—This is a most important adjunct to the management, and the patient need not expect permanent improvement unless the dietetic injunctions are obeyed. Let me also caution the physician not to so limit the food, if possible, that the patient will become undernourished and with it depressed and emotional. The stomach is capable of doing only part of its work, while an extra burden is imposed upon the small intestine. The diet, therefore, must be so arranged that both divisions of the alimentary tract are protected. A diet rich in carbohydrate with a minimum of protein is indicated. In chronic gastritis, especially among those who necessarily perform manual labor, solid foods may be permitted. In achylic states spices and condiments may be permitted within bounds, and the diet should be as varied as possible.

Medicinal Treatment.—This must be governed by circumstances, remembering that, except for the management of symptoms, it is not well to institute a medical regimen that may extend over many months. In hyperacid conditions gentle alkalies may be administered, and gentle laxatives may be combined with them. The ordinary alkaline and carminative prescriptions indicated in hyperchlorhydria are often most efficacious and comforting to the patient. For the occasional sensitiveness of the

gastric mucosa there may be given olive oil, oil of sweet almonds, or liquid alboline, in teaspoonful doses, a short while before meals.

In subacid or achylic conditions, small doses of dilute hydrochloric acid (six to ten drops) may be given after meals, and, if desired, this acid may be combined with pepsin, or *nux vomica*. The administration of huge doses of hydrochloric acid (sixty drops), as advocated by some, is not endorsed by me. Before meals, there may be given with propriety and benefit the bitter stomachics, as *condurango*, *quassia*, or *cinchona*. Three-grain doses of *orexin*, given one and a half or two hours before meals often exercise a stimulating effect upon achylic stomachs. Acidol tablets and tablets of secretin are highly esteemed by some observers.

Mineral Waters.—The treatment of chronic gastritis by the employment of mineral waters, or balneological measures, is much more in vogue in Europe than in this country, though under proper advice and supervision excellent results are sometimes attained.

Different waters may be utilized for stimulating glandular activity, or neutralizing high acid secretions, as the case may be. To stimulate secretion, the saline waters and those containing carbonic acid gas are of most service. Among these may be mentioned Kissingen, or the American carbonic acid charged waters of Saratoga (Congress spring). When the gastric secretion is absent these waters are of no benefit.

In hyperacidity the alkaline waters are useful, among these being Vichy, Celestine, and Saratoga (Hathorn).

In constipation there may be taken Carlsbad, or Mt. Clemens bitter water, though it is best to bring about bowel movements by dietetic and hygienic means.

The saline waters should be drunk before meals, the alkaline or ferruginous waters during or after meals. The aperient waters should be taken on an empty stomach, preferably on rising. Patients of a nervous or debilitated nature should not be allowed to partake of purgative water.

The reason that sojourners at foreign spas or at mineral springs in this country improve so markedly in so many instances, is not so much because of any great virtue in the water, as because of the freedom from business cares and

worries, the exercise in the open air, the change of environment, and the diversion of the mind to outward interests. It should not be forgotten also that the daily ingestion of copious draughts of water causes a steady washing out of the stomach and emunctories of the whole body, so that the sufferer is greatly benefited thereby.

The foregoing suggestions, while somewhat general in their character, have been followed by the writer in many instances with satisfactory results. The presence of chronic gastritis, whether primary or incidental, is discomforting and depressing, and merits the thoughtful consideration as well as intelligent therapeutics of every medical advisor; and earnest efforts toward the mitigation of this melancholy train of symptoms will always bear good fruit.

*GYNAECOLOGY AND OBSTETRICS —ARE REAL, AND WORTH WHILE—AS A DISTINCTIVE FEAT- TURE OF HOSPITAL SERVICE.

H. S. Lott, M. D., Winston-Salem, N. C.

Seventy-five years ago, Marion Sims was called to see a middle aged woman living in the rural district, near Montgomery, Alabama; who had been thrown from the back of a shying pony; the fall dislocating her pelvic organs. In the presence of a classic group of symptoms, suggesting such distortion, the native modesty of the man, which forbade unwarranted exposure, or trauma, to patients of this kind, was mastered by the urgent need for help, and the woman placed in the "knee-chest" position, protected with a sheet. Introducing one finger into the vagina, the uterus was readily located—much below the pelvic health line, while the introduction of a second finger, with retraction of the posterior wall, caused the uterus to return to its normal position—and also exposed to view the anterior vaginal wall; access to which, for surgical repair of vesico-vaginal fistula—had confronted Sims as a most discouraging problem.

Thus the patient was relieved of her distressing symptoms, and the man had

*Presented at the July meeting of the Forsyth County Medical Society, 1920, Winston-Salem, N. C.

made a discovery heralding the dawn of the day of surgical gynaecology. Following this lead, and devising a retractor from a pewter spoon, bent at a right angle, the repair of the most distressing vesico-vaginal fistula was done upon a colored woman. Repeated failures, from faulty suture material, failed to quench his zeal, and when accident again suggested silver wire, instead of the silk he had been using, and he found perfect and permanent closure of the fistula following his operation,—Sims was a very happy man indeed, and this success laid the foundation to all that has followed in this field of surgery.

The evolution of gynaecology, from this time, though the victim of abortions, miscarriages, and premature deliveries, through the efforts of an aggressive and untiring profession, has safely reached "full term" development and recognition, and lives upon a plane of usefulness even worthy of the master by whom the sacrifice was made. Accidents occurring in process of evolution of gynaecology, may be compared to three prime causes resembling those occurring within the nine months' cycle of utero-gestation—viz., the exanthemata, operative trauma, and infection; the difference being that the profession, and its exponents, have featured the clinical phenomena, instead of the patient.

Each decade brings its group of workmen, and also chronicles epidemics of eruptive disturbances in professional ranks, along all lines of surgical progress. Thus the come and go of the "pendulum," with its swing! swing! swing! But after all it is human, and being human is inevitable, with vital currents in it, and a bright and forceful mentality behind it; whose ebb—and flow—like the tidal wave, is in keeping with nature's processes.

The sequellae of these sporadic eruptions by the enthusiast, are quite in keeping with the sequellae of the exanthemata. Born of impulse, rather than of judgment, they may sear the roadway structures for a while; but from them comes, perhaps, a spark of truth, which lives, and lights them afterward.

Operative trauma, with failure in end results, occurs more often in this field of surgery than in any other, the reason being that it is taken up because of its attractive, and remunerative features, and not because men have thought

about it and prepared themselves for it, and have come to realize that gynaecology means—not ablation, or distortion of organs, but conservation of the procreative function of womanhood; and without such realization, mechanical repair, and mechanical distortion of uterus, Fallopian tubes and ovaries, with their delicate structure, wonderfully sensitive procreative function, and an assured future, with retrogressive atrophic changes; by shortening cycles, and blocking circulatory currents, creates a soil for reflex scar tissue neuroses, and degenerative pathology, quite in keeping with the parenchymatous structure of these organs, and most pronounced, and effective, in discouraging results.

In gynaecologic surgery, as in obstetric service, we either confront, or create, a receptive surface for infection. Sims' discovery of non-absorptive silver wire suture material, for closure of his vesico-vaginal fistula, eliminated this factor and brought him success. This lead, closely followed by Emmet, who established the fact that non-absorbent suture material, and needle, must be of the same size; thus preventing an effusion of blood into the track, and eliminating a fruitful source of failure, established plastic surgery as both possible, and permanent. Failure in plastic surgery, may be attributed to departure from these simple, cardinal principles of toilet and technique, augmented, perhaps, by less care, and precision, in approximating mucous surfaces, and ignoring the fact that a tie, brought down, must constrict tissues; while a shot let down, flush with the surface of most delicate structures, may be mashed, and fastened, without hurt.

Pelvic pathology with the surgery applied for its relief, belongs to the gynaecologist. Lawson Tait, of Birmingham, England, the pioneer in this field of surgery, established the justice of removal of tubes and ovaries for pus conditions, and also established the exanthemata as a prime causative factor in the creation of such pathology. Joseph Price of Philadelphia, the friend and pupil of Tait, followed closely in his wake. His first account to the world of abdominal section for pus tubes, done in the slums of Philadelphia, and reporting two hundred cases without a fatality, gave him recognition and prominence; and the men whose privilege it

was to become his guests and pupils, always found behind the stormy parapet from which he worked, establishing his simple, and perfect, toilet and technique, the kind heart and loyal soul of nature's nobleman: "Strong as a man, and gentle as a woman."

Infections, with pus foci, in tubes, ovaries, or pelvic cellular structures, concern and interest the gynaecologist, chiefly because he has learned conservatism about their handling. While the inflammatory process is active, while the fire is raging, and the temperature is above normal, we have learned that it is best to wait, keeping the patient in bed, the head of which is elevated, (the gentle inclined plane being perfectly comfortable, and bringing gravity to our aid), with soft diet, fluids freely and laxatives, until the flame has spent itself somewhat, and there is localization and abatement of its ravages.

Mechanical ablation and distortion of the anatomic arrangement of pelvic organs, which, by blocking circulatory currents, and abolishing function, can only defeat their own objective, and invite, rather than lessen discomfort,—are considered with much seriousness, and, with a fair chance of the woman being cared for by retrogressive atrophic changes, are not done at all. For instance, tumors—which from their size and weight, are a menace to life and comfort from their pressure upon neighboring organs, should be removed; as should a malignant uterus when recognized before invasion has occurred, or one that has become a fibroid factory;—but, and for example, the post-partem sub-involved uterus, and especially in the young woman, if bled freely from its endometrium, and the woman kept quiet, will return to normal size; and the pelvic cellular arch, with its keystone of support remain intact. Please let us not forget two things, first—that the uterus is the organ of menstruation, and second, the distress—in the later years of life—of a vaginal hernia.

Ideal obstetrics is permitting labor to proceed to a successful issue without interference.

Every case of labor is a surgical operation, and should be conducted with the same care and precision of toilet and technique. When it is, obstetrics has arisen to the dignity of "preventive gynaecology," and until such recogni-

tion has reached the rank and file of the profession, and is accepted, and applied by them, the gynaecologist will have the care of the unnecessary accidents, from trauma and infection, originating in the performance of a perfectly normal function.

In obstetric service, two lives are at stake—always. Trauma at times is unavoidable, through disproportion between the maternal outlet and its passenger, but much of it occurs through either ignorance, or indifference, on the part of the accoucher. Patience is the first essential in obstetric practice, and to bear in mind that the cycle of normal labor takes from eight to eighteen hours for its accomplishment. The man who has not patience, and will not give the time to the woman for safe delivery, should not practice obstetrics at all.

Forceps are life savers, but I believe that they are used too often, forgetting the menace they bear to the maternal outlet, and the foetal head.

It is in such crises as eclampsia, that the obstetrician is confronted with the most serious problem. Prompt delivery is essential, and the manual methods, while having given me some safe deliveries, have also resulted in distressing trauma, both to the maternal outlet and the foetus. Caesarian section, the greatest danger of which lies in its attractiveness, being one of the most simple, and the most spectacular surgical procedure made possible by present day toilet and technique; is welcomed, and accepted, to meet obstetric emergencies. My choice is for the high section, of Asa B. Davis, the incision being made above the umbilicus, and as long toward the ensiform cartilage as may be necessary. To my mind, and in my experience, it has advantages over incisions lower down. The uterus is approached at the fundus where the wall is thin, and it is never delivered through the incision. When emptied, and returned to its former home in the pelvis, the incision in the uterus is well below the incision in the abdominal wall. This has advantages, in preventing adhesions; the post-operative period is less stormy, and there is less danger of hernia, and other sequelae.

Post-partem infection is, really, a greater menace to obstetric patients than trauma. Trauma is recognized, and an effort made for its correction;

while infection is not. We forget that such infection comes in all of the varying degrees of such invasion. The severe cases, with rigors and sweats, covering a critical period of weeks, and ending either in a fatality, or a pus focus, are so evident in their origin—that “he who runs may read,” but the mild infection with just a slight rigor within the first week perhaps, with a longer period of convalescence, and failure to furnish milk, the most marked clinical phenomena, are insidious, and fatal to function, and fatal to physical comfort afterward. In these mild post-partum infections, the pathology is much like that of the exanthemata; invasion, with slight effusion perhaps, of pelvic cellular tissues, congestion of Fallopian tubes, with occlusion of lumen, and agglutination of fimbriae—which should “float free,” when the woman stands erect, like a fish’s fins in water), to the surface of the ovary. Thus function is abolished, and sterility established, that cannot be accounted for, because of normal marital relations.

Hospital service, means teaching, clinical, bedside teaching to the pupil nurses, and teaching the patient how to live. In gynaecology, the pre-operative and post-operative care of patients assures either success or failure in ideal results. Obstetric cases, most often, come into the service at about full term, or with labor begun, and it is the post-partum care for which we are chiefly responsible. Keeping the patient quiet from one to two hours after delivery, to prevent uterine relaxation and hemorrhage; elevating the head of the bed for the first week, thus insuring pelvic drainage; a brisk purgative within the first forty-eight hours, with liquid diet, and fluids freely; and a two weeks’ convalescence, under cleanly hospital conditions, means much to every service case, and more of uplift, and enlightenment, throughout the community from which they come.

Have I wearied you—gentlemen; and, if I have will you forgive me? My plea is made in faith and earnestness, to men with high ideals, of altruistic mold, who will crystallize these thoughts, and establish their principles, with the life-saving end they attain—to woman and her offspring.

TOXIC GOITRE IN ORIENTALS.*

W. B. Russell, Sr., B. S., M. D., F. A. C. S.

A cursory study of available literature on disease of the thyroid in Orientals has convinced me that this offers an almost virgin soil for study and practical work. My work in China during the last 11 years has been limited to Nanking, Wuhu, Soochow and Changchow in the Yangtse valley together with one case of toxic or exophthalmic goitre in a Japanese lady from Tokyo. The large majority of the cases of toxic goitre that I have seen in the Chinese have been in women as is also the case with westerners. It is our hope in presenting this preliminary study to the profession in China to stimulate others with larger opportunities and experiences, so we hope this paper may at least prove suggestive and call forth your hearty discussion. As our earlier records of work done in Nanking and Wuhu were meager and are not at hand we shall refer to our work done in the Soochow and Changchow General Hospitals, where we have seen several cases of goitre each year since 1914.

The history of the various forms of Goitre in China and the Far East is largely yet to be written. A hasty review of our China medical journal since its first number nearly forty years ago gives little material. King traveling in the mountains of Szechuen and Thibet reported large goitres as being frequently seen in the mountain natives. We know from text books this is also true of the Himalayas as of the Alps in Switzerland and Northern Italy and parts of the Pyrennees and Andes. In England Derbyshire is so noted for its large goitres the disease there is commonly known as Derbyshire neck and is probably “due to the presence in drinking water of some living contagion which develops in the intestinal canal and produces a peculiar toxæmia.” In America the disease appears to be more evenly distributed throughout the country. Jeffreys and Maxwell in Diseases of China received four reports that indicate its “tremendous prevalence in certain localities” in China. Dudgeon Peking reported: “Goitre is very frequent in the north, among both sexes.” Coltman, Tsinan, “Goitre in

*Read at Peking Conference of C. M. M. A. Feb., 1920.

the neighborhood of Tsinchowfu is remarkably common." S. C. Lewis on an itinerating trip in Southern Hunan passed through" a village of which every member seemed to have goitre" and from Nanninfu Clift reports that his clinics are well attended by goitre patients but speaks of no special endemicity. Maxwell reports goitre as prolific in the center of Formosa in the mountains back of Tainan, and Jeffries seems to think it common on the island of Tsungming near Shanghai. Yet no attempt at classification or any special treatment in this disease is discussed, nor is its cause suggested.

Toxic or Exophthalmic Goitre. In the west Parry first describes a case in 1786 and calls attention to the Exophthalmos and the enlargement of the thyroid along with enlargement or (palpitation of the heart). The Italians claim that Flajani described the disease in 1800. Grave described the disease in 1835 and Basedow in 1840 but although much has been written on the subject our scientific knowledge of this disease dates from its surgical treatment. In this connection the names of Kocher, Halstead, Grile, Mayo and others are memorable.

The simplest classification of the various forms of goitre appears to be that used by Plummer when we were last studying in the Mayo Clinic. This classification, as given by Balfour, divides this disease into four groups as follows. Group I. Non-hyperplastic Atoxic, subdivided into (a) symmetric or thyroidal shaped goitres and (b) asymmetric or nodular goitres. Group II. Non-hyperplastic Toxic Goitre; Group III. The hyperplastic atoxic thyroids, consisting of only 0.8% of all hyperplastic goitres coming to operation and Group IV. Hyperplastic Toxic or Exophthalmic Goitre. It is group IV in which we are principally interested in this paper although it is scarcely possible to pass over the other groups without a word. We have operated in several cases of group I with good results and have seen some cases that from their history we have been inclined to place in group II but we have not the findings of the microscope to confirm the latter. Group III is so rare it is relatively unimportant. In group II are the goitres of several years standing with no toxic symptoms when more or less suddenly toxic symptoms

are manifested by tachycardia, etc., but usually without the exophthalmos. These cases often fail to yield to the accepted medical measures but where the heart, kidneys, etc., have not suffered severely from toxæmia good result have followed the surgical removal of diseased part of the gland.

Chinese patients suffering from Toxic or Exophthalmos Goitre, group IV do not often come to us seeking treatment for their goitre but come for the general muscular weakness, nervous irritability, headache, gastro-intestinal upset, tachycardia, etc. Those patients in our clinics have been women almost entirely and usually give a history of constipation, along with over work, worry and severe mental strain. Family infelicity is often a factor in the case and must be taken into account in its successful management. As I write I am called into my private office to see a case, Special No. 444, Female, age 37, who came first for treatment Jan. 18, 1920, suffering with headache, a lump in her throat, general weakness, legs easily tire, eyes pain her so she can not do needle work, has constipation with poor digestion and pain in pit of stomach at times, is very nervous and has attacks of dyspepsia with palpitation of the heart. Examination shows some symmetrical or apparently symmetrical enlargement of the thyroid of 6 months with exophthalmos with pulse 108 and fine tremor of tips of fingers when the hand is extended. Her seventh child is a boy a little over a year old and she has been unable to nurse him although she has nursed the other six. Menstruation very scant for several months now lasts only two days. Her husband who was with her on her first visit is a man of some means and a member of the Kiangsu Provincial Assembly. I explained to them that it might be necessary to operate for the goitre if rest, hygienic and medical treatment failed. The lady at once said, "I brought Mrs. W. of Wusih to you last year and you treated her and she is entirely well." No. 444 has been on Tonic Mixture one week with a Pill Cathartic Co., for her constipation and direction to rest after the noon meal, a light nourishing diet largely cutting out meat, especially pork. Quit worrying, have plenty of fresh air and sun light. For the last two weeks Easton's Syrup 50% has been given and Cascara for constipa-

tion. Today, Feb. 12, 1920, patient shows a gain in weight of 2 1-2 lbs. with some slight improvement in her symptoms and has had her medical treatment continued until my return from Peking.

I now refer to Mrs. W., of Wusih. She is first class O. P. D. No. 216, age 45, and came to clinic first July 8, 1919, "for trouble with stomach." "Sing Keotung." Has constipation, pulse 84, Tem. 98 2-5. Abdominal examination examination Neg Goitre enlarged (1) has weakness in legs and easily upset nervously. Diagnosis: Dyspepsia and Toxic Goitre. Tonic Mixture and Pill Cathartic Co., with directions for rest and improved hygiene. Records shows medicine was refilled a few days later. She reports again July 25, 1919, and says she feels better but still stool only every third day. Is given Easton's Syrup 50% 200 Mils. and Cascara Tabs. gr. V. No. 5. So our next report is Jan. 26, 1920, "Mrs. H. reported her well."

On July 2, 1918, the day after we opened the Changchow General Hospital 2nd class O. P. D. No. 1, female, age 37, married, embroidery teacher in our Mission girl's school appeared in clinic and gave the following history: "Well until last year 11th month. Had pain in legs and feet, sputum thick, no blood. Went to Dr. W. 6 times took his medicine, improved but legs seemed to be partially paralyzed. On Exam. Pulse found 116 and Temp. 99 @ 10.20 a. m. Had Chinese doctor first month this year. Took Chinese medicine got better but when she worked she would get fever. Goitre enlarged (1) began she thinks first month this year. Husband in Hunan in official work and she has been worried about him for the last 8 months. Has no children (living). Has had two both died at birth, no abortion. Married 13 years. First child born 7 years ago and last 5 years ago. First had hand born first and 2nd pedalic, feet first. menstruation for the last 5 months. Has fine tremor of extended fingers. Exophthalmos. (1). She wishes to enter hospital. Diagnosis: Toxic Goitre. Entered In-P. D. No. 2 July 2, 1918, and discharged July 20, 1918. On July 5, 1918, we operated on case In-P. D. No. 3, female, age 19, for a moderately large Cystic goitre of both lobes and she did O. K. so our Toxic Goitre patient was anxious for operation so was prepared for opera-

tion for July 12, 1918, her own brother standing for her but the mother-in-law refused so the whole procedure was stopped and patient continued on medic-hygienic-rest treatment with improvement. We have taken her pulse at intervals since and a few times have found it as low as 98. Patient has very light work in school, takes an easily digestible diet with little meat and with some remissions has improved. This morning February 13, 1920, her pulse is 128, appetite good, tires easily can not bear excitement, a bowel movement every day, exophthalmos and goitre somewhat improved.

Soochow Hospital case 5 A., a Japanese lady, age 32, father a Samuri and before his death a surgeon general in Japanese army, husband an official in China, mother of three children all well, two girls age 7 and 5 and boy age 2 years. Patient has not been very well since the birth of her last child. Some lacerations of cervix and perineum at that time have not been repaired. Has been almost constantly troubled with constipation with occasional diarrhoea attacks. During the last year she has had several attacks of nervous storm with palpitation of heart and pain and weakness in her legs for which she has been treated by Japanese doctors. The writer saw her in one of these attacks late in the spring of 1916, another at the end of the summer, another in the fall and the last just before Christmas, 1916. In each interval she was able to get out and insisted on keeping up the study of piano which she had taken up the year before along with her eldest daughter. During her attacks rest in bed gave some relief but each attack became more severe and the thyroid seemed larged and harder in each attack when the pulse would range from 90 to 140. The first and second sounds of the heart seemed almost of equal length with peculiar sounds heard with stethoscope over the goitre and the Exophthalmos was clearly marked in the last two attacks. Bromides, etc, with rest in bed was not giving results so operation was decided upon. January 3, 1917, one-half hour before operation in the Soochow Hospital she was given a "Hypo." Morph. gr. 1/6, Atropin gr. 1/100 and Strych. gr. 1/60. On operating table she had Aether 2 ozs. and some Cocaine 1% injected into wound during operation which lasted

45 minutes followed by "Hypo." Morph. gr. 1/8 and Strych. gr. 1/60 before she was taken from operating table. The low horse shoe or collar incision one-half in. above the upper end of sternum was made through skin and platysma which were dissected up, the sterno-hyoid and sterno-thyroid muscles were taken divided in the middle and retracted when the glistening capsule of the tumor appeared in the wound. The isthmus and right lobe appeared not to be enlarged but the left lobe was considerably enlarged so its capsule was opened and the entire lobe dissected out of its capsule on which forcipressure, and tension controlled all hemorrhage. The gland tissue was diseased, very friable and examination microscopically by Dr. Snell showed hyperplasia. After removal of left lobe one of the parathyroids was visible slightly projecting in its own pinkish capsule about the size of an English pea. The capsule of the thyroid was firmly sutured closed with cat gut which at the same time completely controlled all hemorrhage. A small cigarette drain being introduced into closure of capsule. Muscles were next closed with interrupted cat gut in midline and then the platysma was closed with interrupted cat gut and skin with lock stitch of horse hair the drain being brought out at the lowest part of the wound. Patient was given enema of 500 Mils. normal saline as soon as she was in bed and continuous normal saline enema was begun four hours later. After operation the highest mark the pulse reached was 126 and by the 5th day it had come down to 76 and 7th day to 68 and afterward ranged from that to 78 right along. Patient made a satisfactory recovery and 11 months later was delivered of a fine boy by a Japanese midwife. Unfortunately the placenta stuck and was removed by the unsterile hand of the midwife and uterus infected. At that time writer was called and found the patient almost exsanguinated from postpartum hemorrhage so pituitrin was given at once hypodermically as she was still bleeding and then 800 Mils. of hypertonic saline was given subcuticularly and a large dose of Fl. Ext. of Ergot by mouth. Following this writer had to be called the second time operate for pelvise abscess so patient was sent to Tokyo as soon as she recovered and re-

port a few weeks ago was that she is in very good health.

The last case I shall report developed in the Soochow Hospital where we could observe it. Case No. 1153 female age 59, occupation Woman's Operative Ward Ahmah, admitted as surgical patient July 30, 1917. Family history Neg. The patient's trouble began last year in 4th Mo. after she had helped nurse a woman T. B. Knee resection case who constantly had phlegm in her throat. Physical examination shows goitre and fine tremor of finger tips when hands are extended. She has noticed weakness in her legs worse at times and tires easily. Thyroid gland has been enlarging for the last 8 Mo. and at no times seems harder than at others. The writer has taken the pulse from time to time and has usually found it a 100 or less. The goitre is giving some pressure symptoms. Blood is negative has malaria, but patient's temperature is 99. Diagnosis Toxic Goitre. "Hypo" Morph. gr. 1/6 and Atropin gr. 1/100 was given one-half hour before operation when three drs. of Chloroform was given. The horse shoe or collar incision was made through skin, and platysma which were dissected up so as to give wide exposure. The sterno-hyoid and thyroid muscles were then divided in the midline and widely retracted thus exposing the thyroid tumor which was examined. The left lobe was large but the right lobe and isthmus appeared only slightly enlarged so it was decided to leave them. Effort was made to ligate left thyroid vessels but no aneurism needle has been prepared. Capsule of the left lobe was opened forcipressure and tension being made on same to control hemorrhage, the gland was easily peeled out. Capsule was then closed with continuous plain cat gut which controlled all hemorrhage so small rubber tissue drain was introduced to bottom of capsule wound and then muscles closed in midline and platysma and skin closed by subcuticular cat gut the drain being brought out at the lowest part of the wound. Tr. Iod. 3% and sterile gauze dressing were applied. Tumor sent to laboratory and later reported to show slight hyperplasia. Patient was discharged Aug. 14, 1917, cured. She is now working as Amah in the ward in the Soochow Hospital with no return of symptoms.

The results in our surgical work in all our goitre cases have been most satisfactory. In our toxic cases we have been careful not to operate during the toxic storm period and at operation have used special care in regard to the anaesthetic and unusual gentleness in all manipulation, always keeping the trachea in view if necessary for tracheotomy. We feel that some of the lives of our toxic goitre cases have been saved by operation and that others have been given a longer lease of life with their families.

In conclusion: (1). We urge early careful surgical treatment for all Group IV. or toxic or exophthalmic goitre cases not relieved by a reasonable course of medico-hygienic-rest treatment.

(2). That partial removal is safe and justifiable in Group I. cases that are unsightly or giving pressure symptoms.

(3). That we have had little experience in Group II. and III. cases but urge all to be on the look out for such as they may appear to be causes of psychasthenia or neurosthenia or hysteria.

(4). That our study and work with goitre in Orientals has convinced us it offers a large and interesting opportunity for scientific work and useful accomplishment.

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Changchow General Hospital, Changchow, Ku., China.

SUICIDE AND CIVILIZATION.

From The Journal of Sociological Medicine.

Tom A. Williams, M. D., Washington, D. C., read at the 40th meeting of the American Academy of Medicine:

A suicide laid by a coroner's jury to unsound mind, may not be such, according to the real facts. The average person's instinct of self preservation makes it difficult to realize that the circumstances of some lives are such as to make further existence intolerable and seem to the liver to justify suicide.

Causes of morbid feelings are either physical i. e. toxemia (endo or ecto), parasites, drugs, malnutrition, infection, or are psychosocial, i. e., environmentally induced, caused by uncontrollable circumstances, memnonic (conscious or subconscious), from fear the cause of which may be known or unknown consciously etc. These psychic conditions become doubly active by influencing the physical conditions.

Cases Illustrative.

1. An engineer of 38, physically good, had been less active than usual and worried. He was unable to concentrate, undecided, fear possessed him in the mornings, he was depressed. A low protein diet caused recovery, as the case was one of hyperprotocosis.

2. Lawyer, 28, developed a state of chronic fear, the cause of which he did not know and of which he was much ashamed. He had fought it for years, playing football and becoming a lumberjack. He contemplated suicide. Examination of past memories revealed a relative who had tried various "hardening" processes on him and his brother, beginning as early as four years old. These consisted in such things as chasing them with a whip, throwing them in the water and almost drowning them to teach them to swim, etc.

His insomnia and poor appetite were corrected. The psychological situation was explained to him, he was shown that fear was not a necessary sequence, he was instructed in the mechanism of fear and completely recovered.

3. A young banker, after prolonged overwork and a broken engagement had hysterical weeping, agitation and contemplated suicide. Hard physical work outdoors distracted his mind and removed the irritability so that he returned to work.

4. A farmer's boy of 22 four times attempted suicide. His situation seemed intolerable to him because of interfering relations and friends. Also it devolved that until 18 years of age he had practiced onanism. He had ceased because boys had jeered him and told him he had ruined himself. He believed himself mentally inferior. The error of his ideas was explained to him and the reason of his shame. Recovery occurred in 10 days.

Not all maladjustments cause suicide. Some fear it, some are aboullic, some believe it wrong.

While physical changes aggravate distress and lower resistance the act depends primarily on memory and associated complexes which pervert the will to live.

Whether the motive in suicide is simply the reflex of a dulled brain or the complicated reasoning of an intelligent human being to whom the conditions of life are intolerable, it is an impulse derived from a reaction which is psychological. Hence the motive must be sought and dealt with. The man who has the attitude that life is not worth living must be re-educated.

It is doubtful if the moron is more apt to commit suicide. Although he has not the power of inhibition he also fails to have the power of reacting to a difficult situation, therefore he feels the difficulties of life in a far less degree than the more highly developed man.

We are all potentially psychopaths. We all have possibilities of mental deviation. The work of the neurologist physician is to teach the man how to avoid the tendency to a morbid view of life and to overcome a bad mental heredity.

BETANAPHTHOL POISONING IN THE TREATMENT OF HOOK- WORM DISEASE.

In order to test the efficacy and toxicity of large doses of beta-naphthol in the treatment of hookworm disease, a series of four experiments, involving in all seventy-nine cases, was undertaken by W. G. Smillie, Sao Paulo, Brazil (Journal A. M. A., May 29, 1920). The four experiments prove that betanaphthol in 6-gm. doses, given on three successive days, may produce a severe tox-

ic effect similar to that caused by benzol (benzene, C₆H₆), in that it specifically attacks the red blood cells. In the four cases of betanaphthol poisoning reported, while the symptomatology varied greatly, the essential pathology common to all cases was simply a destruction of red blood cells with, perhaps, in the severe cases a destruction of the blood-forming cells in the bone marrow. Comparison of the cases and of their history previous to the betanaphthol treatment would certainly seem to indicate, first, that the intoxication shown by the poisoned cases was not due to their greater intestinal absorption of the drug; second, that the size of the dose was not proportionate to the degree of intoxication, and third, that the degree of previous anemia in the patient apparently had nothing to do with the toxic effect of the drug. The experiments also showed that the drug had little or no effect on normal kidneys. In certain cases, to be sure, there was much albumin in the urine, with many casts; but this condition was due to the elimination of the waste products from the blood. However, the author's clinical experience showed that large doses of betanaphthol (10 gm. for adults) used in the treatment of seventy-nine cases of hookworm disease produced very severe toxic symptoms in two cases, and also produced marked changes in the blood cells of two other cases. Betanaphthol, in 18-gm. doses, is so toxic that it cannot be recommended for general use in the treatment of hookworm disease.

GOV. SMITH OF NEW YORK VETOES OSTEOPATHIC BILL.

Recently Gov. Smith of New York has vetoed a bill passed by the state legislature providing for the regulating of the practice of chiropractic by the licensing of proposed practitioners by a board selected by the state chiropractic society. In his veto message the governor refuses to approve the placing of such power in the hands of "privately incorporated society, over the membership of which the state cannot possibly exercise any control," declaring "that instead of regulation by the state, as may have been intended by the bill, the regulation is really by the N. Y. Chiropractic Society." The N. Y. press fur-

ther notes the "state department of education and the state board of health urged disapproval of the bill."

Manifestly Governor Smith is taking a correct view of the situation as regards the attempt of so-called "medical cults" to secure state recognition as such instead of entering the broad field of general medicine through the regular channels.

Our forefathers builded wiser than they knew perhaps when the original state enactments regulating the practice of medicine in North Carolina were enacted which simply provided license by a board of examiners elected from the reputable physicians of the state medical society. Fortunate indeed would it have been if this enactment could have remained unaltered, but more or less successful attempts to recognize "cults" have from time to time sprung up in the legislature and secured more or less consideration.

But for all such attempts and their promoters it should ever be made plain that the broad domain of general regular medicine covers everything calculated to ameliorate the course of disease, to prevent the development of disease in healthy persons, and to cure disease where possible, and special license to "practice after some particular school" is an utter absurdity, and it is high time all intelligent people of every community were recognizing such facts. Meanwhile the profession of North Carolina should regard itself fortunate in the main in having control over the licensing of the medical profession within the borders of the state, and should jealously guard its responsibilities in the future as in the past to the end that no future legislative body may under some suddenly inspired impulse revoke this grave responsibility and honor placed in 1859 on the medical profession of the state.

The suggestion of placing the licensing of physicians in other hands than that of the profession is superfluous for the very simple reason, who better, or so well, can determine the fitness of men of medicine as doctors themselves.

Again, were the licensing of practitioners of medicine given over to others than practicing physicians, would there be any probability the people would secure better prepared practitioners than now? Would a part-civilian board better know the professional

needs of the public? Or would it be more than likely such board would be more responsible to the suggestions of "medical cults"? Physicians, as a rule, believe the latter, and so believing will naturally resist any such attempts to relieve the organized medical profession of North Carolina which has carried this responsibility since 1859 creditably, of such duty, to attempt an experiment merely because some northern state which began the requiring of medical licensure long after we did so, believes in their system.

North Carolina was a pioneer state in medical licensure, and her medical men will jealously regard any effort to relieve the profession of such responsibility, especially without full and free discussion of the same in the state medical society, as unwarranted and not in accord with the wiser thought of the professional leaders of the past who considerably brought all suggested innovations in our medical statutes before the annual sessions of the state medical society for its thoughtful discussion and consideration.

Roentgen-Ray Injuries.

The cable reports that the radiologist, Dr. C. Infroit, of Paris, had to have his remaining arm amputated on account of roentgen-ray injuries. This is the twenty-fourth operation he has had to undergo since 1898.

Brazilian Hospital Transferred to France.

The hospital installed by Brazilians in Vaugirard, France, at a cost of \$2,000,000 has been offered by the government of Brazil to France and has been accepted by the Paris Faculty of Medicine.

A specialist is a man who has forgotten about all the fields of medicine except the one he practises.

Oh doctors, they are noble men.

(I hate 'em.)

Most necessary too, but then—

(I hate 'em.)

They kick the microbe in the shin,

And stick to you through thick and thin

But darn the luck, they shut you in,

(I hate 'em.)

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CHARLOTTE, N. C.

"Read not to contradict and confute, nor to believe and take for granted, nor to find talk and discourse, but to weigh and consider."—Francis Bacon.

"VICTORY."

Work to win! Get to the head of the class; get more sick people well than the other doctor; study your case and treat every child you are called to see as if he was your child; don't have one standard of carefulness for yourself or some member of your own family and another standard for the other fellow or a member of his family. If it's worth while for some one near and dear to you it is worth while, too, for any other person who is sick and is trusting you for help; charge an honest price for the service you render.

Do to others as you would like to have them do to you.

It is when you sometimes lose in a fight that your real inner self is discovered. If you sulk and are sore, if you decry the winner and begin giving reasons why he is no good and why you should have won, you are small, that's all—just petty and mean. But if you bob up smiling, bear no malice, wish the best man luck, learn a lesson from your failure and his success, then ten to one you are a better man than the victor, and victory will come to you.

Above everything else stands the will to conquer based upon confidence. But this will is nothing if it does not know how to utilize the means.

After all business is not all dollars. The dollar is not the only standard for measuring success. Allied with the desire for gain must be the desire for progress, improved methods, scientific development and pride of success in these important matters. Even more satisfying than dollars is a dividend in the shape of satisfaction in being instrumental in carrying forward to high-

er stages of development the profession which you have made your life work.

Improvement begins with "I."

You and I may both be looking at some famous painting. To me it may appear nothing out of the ordinary, but you, if you have a thorough knowledge of art, will see in it a hundred beauties undiscernable by my untrained eye.

Have you not sometimes sweat as it were great drops of blood over some case that has day and night been on your mind. Then one day almost in desperation called a consultant. You have introduced him and given him the "carte blanche" to proceed with his examination. Then behold! perhaps one word of the patient or one little visible symptom has started him off on a line of investigation and a clear solution to the problem. Then the clue which he picked up stands out in your own eyes as bright beacon light but you had failed before to see it. After all what lies behind your eyes, more than what is in front of your eyes, determines what you see.

A young employee of the Pennsylvania railroad received word that the burning of a wooden bridge was holding up traffic. He immediately saw vast possibilities flowing from this incident and proceeded to organize a company to build iron bridges to take the place of wooden ones. The enterprise was successful and that young man became the second richest man in America. His name was Andrew Carnegie.

What we really see with is our brain, our intellect, our mind, our knowledge, our wisdom.

Success depends largely upon seeing things more clearly and seeing farther than other people.

Intelligent seeing increases one's knowledge, and knowledge increases one's ability to see.

If the other fellow wins the victory over you, blame **yourself**, not him.

Some of the most genuinely successful men to be found anywhere are neither rich nor famous, but they are finding intense satisfaction in doing the work they are doing because they feel that it is exactly the work they are fitted to do and they have the consciousness that they are doing it to the very limit of their ability. They are putting into the world the very best that is in them.

A man whose position in life adds weight to his words has said, "Not because I read it in the Bible, but from my own observation and experience I have learned as profoundly as I have learned anything that it profits a man little to gain the whole world if he loses his own innate self respect and deservedly loses the respect of his fellow men."

The fruits of twenty-four carat victorious success are the highest development of one's own character and capacity, the achievement of the largest possible measure of worthy service within one's sphere whatever that sphere may be, and as a rule, the esteem of one's friends and fellows.

SUCCESS.

It's doing your job the best you can
And being just to your fellow-man;
It's making money, but holding friends,
And staying true to your aims and ends;

It's figuring how and learning why,
And looking forward and thinking high,
And dreaming a little and doing much;
It's keeping always in closest touch
With what is finest in word and deed;
It's being thorough, yet making speed;
It's daring blithely the field of chance
While making labor a brave romance;
It's going onward despite defeat
And fighting staunchly, but keeping sweet;

It's being clean and it's playing fair;
It's laughing lightly at Dame Despair;
It's looking up at the stars above,
And drinking deeply of life and love;
It's struggling on with the will to win,
But taking loss with a cheerful grin;
It's sharing sorrow, and work, and mirth,

And making better this good old earth;
It's serving, striving through strain and stress,

It's doing your noblest—that's Success.
—"The Rambler."

BETTER HOSPITALS.

Under this caption there appeared in the June issue of World's Work a most lucid article by Hawthorne Daniel which will do much to "bring home" to the great American people the price they are paying in human lives and human efficiency for present day carelessness

in the management of our hospitals and the care of patients in them. Members of the medical profession are just plain human beings and like other folks need to be prodded now and then out of the easy-go-lucky ways and habits that we so easily fall into. The profession is honest and conscientious but we honestly fail to comprehend sometimes just how much we are failing to accomplish which might be accomplished by more painstaking effort and deliberate consideration.

We have had pleasure in the past in referring in the Journal to the splendid, altruistic work accomplished by the American College of Surgeons in bringing the profession face to face with a realization of its shortcomings as individuals and institutions.

When a publication like the World's Work exposes to the public existing conditions and points out their cure it is bringing into play a power for our own good that can not be lightly passed by.

Among the many valuable points stressed, the author picks up at random two hospitals, each treating 100 patients of the same class and severity.

Hospital No. 1 is guided by the regulations laid down in the "minimum standard."

The other, No. 2, is run according to the lax methods still so largely prevalent.

	In Hos- pital No. 1	In Hos- pital No. 2
Complete physical examination, including blood count	100	14
Number of consultations held	41	2
Working diagnosis recorded in advance of operation	100	None
Progress notes recorded by doctor	100	None
Incorrect diagnosis	1	14
Infections following operation	3	12
Number patients relieved	94	77
Number patients died	3	9

Is it conceivable that in the light of this table a sane and sensible individual, with his eyes open, is going to send his wife, daughter or brother to a hospital whose method of management allows the death of exactly three times as many persons as the other hospital?

Only a "dead one" can fail to be awakened from his complaisance by such prodding as these facts cause when published to the general public—facts the public are justly entitled to and should have known long ago.

The analysis of the table for Hospital No. 1 shows that a complete physical examination was made and recorded for each patient; that in order to clear away doubt as to the diagnosis, consultations were held in 41 cases; that a working diagnosis was then in each case,—in fairness to the patient,—recorded in the permanent records of the hospital; that after the operation the physician or surgeon in charge of each case made or signed daily a statement of progress of the patient; that infections developed in three cases, that one incorrect diagnosis was made; that the number of patients apparently relieved of their illness was 94 and that three patients died.

What a different picture is shown by an analysis of Hospital No. 2. Let it be emphatically understood, too, that Hospital No. 2 was not chosen as an example because of its bad conditions, for on the contrary it is well above many and may be considered as a very fair representative of those which have not as yet adopted the program of the American College of Surgeons.

In No. 2, 86 of the 100 patients went to operation without a complete examination—with only a sort of guess diagnosis and really it must have been almost a superhuman doctor else they would have reported even more than 14 incorrect diagnosis. If one thing is done haphazard why should we not expect everything else would be done the same way. Evidently "The Lord was good in spite of the doctor" for they report only (?) four times as many infections following operation as Hospital No. 1.

Nurses trained in No. 2 could certainly get only a careless training in sterilization and preparation and the worst is they are started in their professional life with a terrific handicap for which their clientele must continue to pay. Then only 77 patients received apparent relief as against 94 in No. 1. What became of the other 23? Well nine paid the supreme price and the other 14 after a cruel disillusionment, a realization of misplaced trust and con-

fidence were sent out into the cold with probably a depleted purse to hunt another doctor who was trying his best to live up to the best light obtainable and actually succeeding in getting more sick people well.

The American College of Surgeons does not brandish any "big stick," but it does believe that sick people are entitled to the best that can be done for them and it wants them to know who the men and institutions are that are willing to take pains and do that best.

A doctor or a hospital that claims the confidence of the people and the protection of the State, can certainly do no less than heed the warning and live up to the best and "minimum" standard.

Palestine's first medical journal, "Harefoah," (Medicine) has just made its appearance, published by the Jewish Medical Association of Palestine. The journal is a quarterly and its first issue is dedicated to the memory of the Jewish physicians and nurses, who "lay down their lives in the years of upheaval in the Holy Land."

The objects of the medical association, as outlined in the quarterly are to strengthen and coordinate the medical forces of the country and to collaborate with doctors outside Palestine; to give the medical work a national as well as a humane value; to prepare a native soil for Jewish scientists; and to help in the creation of the Hebrew University.

Medical work in Palestine has advanced rapidly during the past two years, stimulated by the American physicians and nurses with the American Zionist Medical Unit, who have taught the native members of the profession, all the latest ideas in medical work and sanitation. Clinics are held by the American doctors, to demonstrate to the Palestinian doctors, the most modern methods, and lectures are given at regular intervals.

The hospitals and clinics established by the American Zionist Medical Unit in Palestine, are planned as the beginnings of the Medical College of the Hebrew University at Jerusalem, which Prof. Patrick Geddes, noted town planner of the University of Edinburgh, is designing.

Urology

A. J. Crowell, M. D., Department Editor

Testicle Transplantation.

Operations have been performed by L. L. Stanley and G. D. Kelker, San Quentin, Calif. (Journal A. M. A., May 29, 1920), in eleven cases with human material, and five with testicles removed from young rams. The time elapsing since the use of animal tissue has been too short to make any deduction as to its value. In five patients, only one testicle was implanted into the scrotum, while in six others, double transplantation was performed. Results have been apparently as good with the single as with the double graft. One whole testicle of a ram was embedded in the scrotum of each of two patients, but they began to slough in seven and sixteen days, respectively. One came away entirely, while a small part of the other remains after six weeks. In three other cases, only half of a ram's testicle was used, but in all, sloughing began seven days after the operation. The authors are of the opinion that the transplantation of human testicles has a decidedly beneficial effect on the well-being of the patient. They do not believe that the implant lives. Probably during the process of necrosis, certain bodies are given off into the lymphatics or blood stream which stimulate the patient in some unknown way. The authors are unable to determine whether these beneficial effects are due to any action of the interstitial cells of Leydig or any other definite part or parts of the testicle, although they have certain evidence which seems to show that possibly the interstitial cells have more effect than the seminiferous structures. On microscopic examinations of the testicle to be implanted in one case the epithelial cells of the seminiferous tubules were vacuolated and more or less degenerated. In places the intertubular tissue was dense and cellular. There were small islands of these cells scattered about, which might have been interstitial cells. They were relatively large, with rounded nuclei. The same tissue engrafted into a eunuchoid, aged 43, caused sexual desire to appear, whereas it had not been present before. The

length of time which these beneficial effects last has not been definitely determined by this work. It is probable that it lasts more than a year. All the patients that are benefited are still enjoying this improvement.

Gynecology and Obstetrics

Robt. E. Seibels, M. D., Department Editor

The Birth of the Placenta.—Obstetricians vary a good deal in the technic they employ in the third stage of labor. The variations range all the way from forcible extraction by tugging on the cord immediately after the birth of the child, to waiting thirty minutes before making any effort to aid the patient to express it. The procedure recommended by Cragin in his textbook, as well as in his teaching, was as follows:

The nurse locates the fundus at the birth of the presenting part and follows it down with her hand and then guards it during the time the physician allows to elapse before taking steps to express it—if it has not been delivered spontaneously without assistance. His rule was to wait twenty minutes, unless there be hemorrhage in which case the fundus was massaged vigorously until the hemorrhage ceased or the placenta was expressed. The nurse must be checked up to be sure she has her hand on the fundus and not on the symphysis pubis—likewise she should not press hard enough to cause the patient discomfort.

During the period of waiting the obstetrician may well employ his time in ligating and dressing the cord and putting argyrol or silver nitrate in the baby's eyes. This is also an excellent opportunity for him to examine the baby thoroughly for abnormalities as it is better for him to find them than to be told of them later. If time still hangs heavily on his hands he can examine the vagina and perineum for lacerations; it is the practice of some to do the perineorrhaphy before the delivery of the placenta on account of the freedom from hemorrhage that obtains at that time.

At the end of twenty minutes from the birth of the child, the fundus is taken over from the nurse. The fingers

of the left hand are placed behind the fundus, the thumb in front, and forcible compression is made on it at the same time he presses the fundus downward in the axis of the parturient canal. This compression is made during a uterine contraction and it may be necessary to repeat several times before it is delivered. The placenta is received in the right hand and is gently lifted away—care being taken not to pull it suddenly as it may be adherent by the membranes and a portion be torn off and left behind. The fundus is then kneaded gently a few times to express any clots and is then turned back to the care of the nurse who continues to guard it for one hour after the birth of the baby. The placenta and membranes should be carefully examined to make sure none has been left behind and then ergot may be administered.

We realize that this is rather extreme conservatism as compared with the method used successfully in many cases. But in obstetrics we must remember that fully half of our work is prophylactic—the prevention of fetal and maternal morbidity and mortality—and we are not so much interested in what we can do and “get away with generally” but in doing what is safest to prevent accidents which may lead to catastrophes. Among those, often caused by faulty technic in the third stage, may be mentioned inversion of the uterus from pulling on the cord or pushing on the fundus, and bruising of the uterine musculature from too vigorous massage with subsequent dilatation and hemorrhage.

Vaginal Douches.—Experience with a large number of women in a gynecologic clinic has showed that the average woman does not know how to take a douche. And it is not surprising, for how many doctors in prescribing a douche, instruct the patient in the proper method of taking it? “Every woman has a douche-bag” was an old saying around the college: we may take it for granted that she has one—and be right generally—and that she uses it improperly—and be right more often.

Our experience has led us to prescribe a douche with as much care as we would use in directing a pupil nurse how to give a hypodermic. Insist that the douche be taken in the dorsal posture on a douche-pan, not sitting on the toilet or stooped over a bucket. Insist on the

solution being as hot as can be borne by the hand and tested with the hand just before it is used. Insist that the douche be timed and not less than ten minutes be given to it. Urge that a ten minute rest be taken while lying quietly on the bed after each douche—an hour's rest would be better but is seldom practicable.

It is not difficult to have these directions carried out in the majority of instances: they do involve a good bit more trouble than the usual slop-jar-1-minute-back-at-work-method, but the results, in cases where a thorough douche is indicated, justify it all. And the final argument is “If it is worth doing at all, it is worth doing right.”

Relation of Hyperplasia of Endometrium to So-Called Functional Uterine Bleeding.

The cardinal points elaborated by Emil Novak, Baltimore (*Journal A. M. A.*, July 31, 1920), are: 1. Functional uterine bleeding, occurring in the absence of any gross pelvic disease is very common at the menopause, when it often leads to the suspicion of malignancy. It is next most frequently observed at or near the time of puberty, but it may occur at any age. The bleeding is commonly of the type of menorrhagia, with not infrequently periods of amenorrhea.

2. A frequent histologic finding in these cases is the condition that has been called hyperplasia of the endometrium. This is characterized by an overgrowth of both the epithelial and stromal elements of the endometrium, with the production of a perfectly distinctive histologic pattern, which makes its recognition easy by means of the microscope.

3. There are good reasons to believe, as I have shown, that hyperplasia is not a primary disease of the endometrium, but that it is secondary to an endocrine disturbance of the ovary. The exact nature of this functional disorder, and the precise histologic changes in the ovary which are associated with it, have not as yet been satisfactorily determined.

4. The secondary nature of hyperplasia of the endometrium explains the failure of curettage to bring about permanent cessation of the menorrhagia

observed in these cases. This procedure merely attacks a local manifestation of the underlying cause—an endocrine disturbance involving the ovary.

FEMORAL HERNIA OF OVARY.

Two cases are reported by W. W. Grant, Denver (Journal A. M. A., July 24, 1920), in which he operated for ovarian hernia in the crural canal. He says that no reducible, herniated ovary should be removed during the child-bearing period if it can be effectively replaced within the abdomen and its recurrence prevented by operation. At other times and when required by pathologic considerations, its removal is advisable.

Orthopædics

Alonzo Myers, Department Editor

In the last issue of the Journal I took up the subject of pain in the lumbar region, paying special attention to symptoms and diagnosis of Sacro-Iliac derangements. I also expressed my objection to radical operative procedures, therefore I have been requested to outline the treatment of this condition which I am briefly giving here.

Treatment

In the traumatic type, treatment depends on the severity of the case. In mild cases an adhesive strapping about 2 1-2 inches wide, applied midway between the crests of the ilium and the trochanters, passing through the third sacral segment, is applied. Whether this dressing acts as an annular ligament to the glutei according to Lovett, or fixes the joint according to most other men, it relieves the symptoms as long as it is taut. In more severe cases in which the simple measures have failed, manipulation is the method par excellence, because as in any other joint in the body where we have an inflammation, whether it is traumatic or inflammatory, the muscles go into spasm and protect the joint. This manipulation is done preferably under a general anesthetic with the patient on his back by means of flexion of the extended limb over the abdomen until the foot at times almost touches the chest. This manipulation must be done thoroughly

until the muscles are absolutely relaxed. Afterwards the patient is put up in a long plaster spica from the nipple taking in one knee. Care must be used to keep the lumbar spine in its normal curve and at times adhesive strapping applied before the cast is applied is very beneficial. The cast must thoroughly hug the body. Some men use only the body cast, taking it well below the hips. It has been my practice to use a long spica and by this means I get my patients up on their feet earlier and then get them home. They wear this cast anywhere from two to six weeks according to the severity of the symptoms and the urgent needs of the patient. After the cast is removed if necessary they are given proper support, men a corset with two bars which fit in well to the lumbar region. The corset helps to keep the proper posture and protects the patient from undue strain on the back.

General Considerations.

Mild sprains often repeated produce a chronic condition with adhesions and contractions of the posterior muscles. The lumbosacral joint is also the seat of sprains, and a dislocation of the posterior inferior facet of the fifth lumbar vertebra is not rare.

Symptoms.

Patients may not stand erect but sometimes after temporary inability, they get up and are able to go home, often they remain at work. Pain, tenderness, muscle soreness, rigidity and a flexed position of the spine are the symptoms in these cases and they are most often treated for contusions and sprains of the back. After getting out of bed if they have been confined, the rigidity of the spine does not disappear. They still complain and in a short while a kyphosis appears and then a roentgen ray is taken and the proper diagnosis made.

Diagnosis.

Most of these cases are hard to differentiate without the aid of the roentgen ray and in these cases none but the most competent man should attempt to ray the back. Where the body of the vertebra is fractured a side view is essential to give you the proper detail.

Treatment.

The immobilization in plaster cast or efficient brace to be worn indefinitely depending of course on symptoms, will prevent deformity and allow repair to

take place except in the most severe cases when more than one vertebral body has been crushed, when I believe the best results will be obtained by osteoplastic of the spinous process lamina and lateral articular process, and in these cases a plaster jacket or brace should be worn for at least six months to a year or longer or until the back is strong.

END-RESULT OF HALLUX VALGUS OPERATIONS.

A report is made by Homer Waldo Spiers, Los Angeles (Journal A. M. A., July 31, 1920), of ninety-six cases. A result was considered satisfactory if the patient could pursue his usual occupation with little or no discomfort. There were seventy-eight operations classified as excision of the metatarsal head; of these, 61 per cent were satisfactory and the remainder unsatisfactory. Of the latter group, 56 per cent had unsatisfactory after-treatment. Of this group whose results were not satisfactory, it was found that 70 per cent were compelled to follow occupations that required much standing and walking, working as waiters, policemen, cooks and mechanics and the like. The complaints were largely painful transvers arch (metatarsalgia), partial or complete ankylosis, deformity, or a combination of the three. There were eight operations performed by removal of the exostosis only. Seventy-five per cent were wholly unsatisfactory. Two patients expressed themselves as partially satisfied. In the seven operations by the Kellar method, all the patients reported satisfaction and the examinations were uniformly good. This end-result study, analyzed as a whole, shows favorable results in about two-thirds of the cases.

State Medicine

L. B. McBrayer, M. D., Department Editor

Doctor and Health Insurance.

("The Survey" July, 1920.)

That part of the medical profession which is hostile to health insurance is very badly served by some of its spokesmen. If they are to be accepted as representative of present day physicians

it would seem as if the falling off among them might be compared to that which Hamlet noticed between his mother's husbands. The former King, his own father, it will be remembered, was a pretty good king as kings went in Denmark in those days.

Physicians are proverbially gentlemen. They are public spirited. They are the first servants of humanity, responsible to their conscience and amenable to the high ethics of their profession. They are law-abiding and respecting. They do not work for filthy lucre, but for the satisfaction of preserving life and safeguarding health. They are the very salt of the earth.

But in the new counterfeit presentment which their self-appointed artists have drawn for us, they are none of these things. They have gone into politics, not to secure pure milk, better housing, or an efficient health department, as it is their noble tradition to have done so often; but to defeat excellent members of the legislature for having voted for health insurance. They are after power, not in order to serve, but in order to protect their pocket books. Like Britons, they never, never will be slaves.

If the state enacts laws providing for the distribution of the costs of sickness—although this is an economic and not a medical question at all—they will refuse to practice medicine. They do not have to care for the sick—no, sir! they will go into business or practice law. Better still, they will go into politics now and defeat every candidate even of their own party who has anything whatever to do with extending the insurance principle to sickness.

They don't believe in workmen's compensation either. They were fooled that time, but never again! What does it matter to this degenerate type of physician that sickness is the chief cause of poverty? What does it matter that industry is creating a sickness disability every day, for which it does not provide financially? Not workingmen but business men and investors are the better paying clients. Therefore let us become the tools of exploiting employers; and try to persuade workingmen that they are better off in a chaotic, anarchistic, individualistic practice of medicine than in one which is organized, socialized and modernized. Let us insin-

uate that these pestiferous intermeddlers have a sinister motive. They are probably chiropractors or osteopaths in disguise. At any rate there is a "nigger in the wood pile" some where. They may mean well but probably not: probably they are crooks—these paid agents of the quartet lettered conspiracy. If there is any meeting which is favorably impressed by the arguments in favor of health insurance it is because the meeting is packed—even if this reflects on reputable citizens.

This is not our caricature. It is that which the medical profession are allowing physicians presumably in good standing not a thousand miles from the New York Academy of Medicine to draw of present day physicians.

It is time for plain speech. Are the doctors concerned about the present unsatisfactory conditions or not? Are they concerned that thousands of the sick poor do not get the care which they should have; that the majority of patients get attention later in the course of their disease than is desirable for effective treatment; that a very large number cannot for lack of means carry out the treatment which the doctor prescribes or would prescribe if he thought it were of any use; that it is a matter of accident whether a patient falls into competent hands or not; that nursing is wholly inadequate; that hospital and sanatorium care is not available for a very large proportion of those who need them? If doctors are concerned about these things, are they content that their own charitable service shall salve their conscience rather than some comprehensive plan of dealing with the most of medical, surgical, maternity and nursing care shall be devised and put into operation? If physicians object to compulsory insurance, are they ready for state medicine as an alternative?

What concerns us is to know whether doctors conceive that the obstructive, dog-in-the-manger, pettifogging tactics by which health insurance is now opposed in their name will add to the esteem in which the medical profession is held or that it is compatible with their dignity and traditions.

When the New York Court of Appeals in the *Ivins* case made an absurd decision which was immediately overruled in the only way possible—by a constitutional amendment—a blow was

inflicted on public confidence in the courts from which they have not recovered. By such an unfortunate incident—unfortunate from the point of view of those who desire public confidence in the courts—was the inauguration of workmen's compensation heralded.

It will be unfortunate again if by stupid, narrow, selfish, and unworthy leadership, the medical profession, instead of guiding and leading the next step in social insurance, puts itself similarly on record as indifferent to the costs of sickness in our modern industrial communities and supremely concerned about fees, the attainment of financial privilege and an autocratic independence as the treasured goal of successful medical practice.

There are ample grounds for differences of opinion about any particular plan of health insurance. This ebullition of gratuitous advice has nothing to do with such honest differences of opinion on their merits. E. T. D.

Will the Medical Profession Seize Its Opportunity for Leadership in the Coming Medical Reorganization?

"One needs to refer only to the available reports of sickness surveys to find justification for the charge that private medical enterprise does not meet the social need for medical care. Let us clear in our minds that this is not an indictment of medical men at this point, but of the scheme under which they are operating. Regardless of any defense or explanation that private practice may offer, the great charge seems to stand as a fact that upwards of one-fourth of those seriously ill enough to be confined to bed, go without medical care. Unless medicine as now organized can adjust itself to meet the challenge of the uncared-for sick, the medical profession must expect the lay public to cast about for a scheme of medical service which will operate with better than seventy or seventy-five per cent efficiency."

This conclusion is reached in an article in *Modern Medicine* for April, 1920, by Theodore J. Werle of Milwaukee, "a lay medical worker," who has been "in public health work for nearly ten years." Mr. Werle writes, significantly, that in his contacts with the public he has seen crystallizing the decision that "with or without medical leadership,

something is going to be done about this business of promoting health."

Reorganization of medical practice is inevitable. A new order is made necessary by social conditions. It will be forced by the growing public determination to put medical science at the service of all. Will the new scheme be a radical departure from existing practice—say, State Medicine? Or, will it be a plan based on careful consideration of the demands of the profession—such as has been carefully worked out for medical organization under proposed workmen's health insurance laws? The answer, Mr. Werle points out, rests very largely with the doctors, themselves.

To illustrate a disposition on the part of the public to go ahead with needed improvement regardless of obstruction by physicians, Mr. Werle tells what happened in one city where an organization of women "decided that something should be done to reduce the cost of medical service for certain types of families in their city, families forced to go without medical care except in acute illnesses, yet families that were not paupers." These women sought but failed to secure the co-operation of the physicians of their county on any practical basis. But that did not deter them. He reports:

"The women were convinced of the fairness of their proposal and were determined to put it through. Here is a significant thing. They did put through their plan—a public health dispensary—in face of the doctors' opposition. The public never for a moment accepted the medical men's viewpoint and the dispensary is operating today with splendid success."

Mr. Werle calls attention to the fact that leaders in the profession are aware of public sentiment and have counselled wisely that the only true course for the profession lies in taking the lead in the formulating of new policies adding that—

"Although some of their own men have been sounding warnings the recent action of a group of New York State physicians in forming what they call a Physicians' Protective League to fight health insurance as a menace to the profession, is an example of the kind of reaction which will deprive medical men of the leadership in medical reform—a leadership which the public

is willing they should have."

The nation-wide campaign for adequate medical care and disease prevention, Mr. Werle here suggests, is really constructive:

"As seldom has happened before in their history, this campaign affecting the doctors is based on fact, not prejudice. This campaign is not directed against the science of medicine or any of its adjuncts, such as vivisection. It is directed against the present scheme of the practice of medicine. The public is dissatisfied with this scheme not for the things it is doing, but for the things it is not doing. In other words, medical practice is much in the position of a man whose job has grown faster than he has. The man must do something pretty soon or his boss will. This is the dilemma. * * * Physicians should not lose sight of the fact that a considerable proportion of the lay public is already engaged in some part of this marvelously complete health campaign. No merchandising scheme with its jobbers, wholesalers, retailers, canvassers, and demonstrators was ever more complete, or will reach nearer 100 per cent sales than this loosely organized, frequently overlapping, sometimes conflicting effort of the public to sell itself the prevention idea. And this fact is very clear—the idea is "getting over." * * Many doctors see medical service only as a means of earning a livelihood. With them it is a matter of bread and butter. They are not aware of their tremendous importance in the social order. The present scheme of things meets their needs and they are suspicious of innovations. On the other hand, health and disease are to the layman a matter of life and death, not merely bread and butter. The layman feels that there are other things a doctor might do if he does not like the return he gets from the practice of medicine, but a life once lost cannot be replaced. And just now, on the doctors' own statements, too many lives are being lost needlessly."

On the well-supported premise that blind resistance is powerless to stay public demand for medical reorganization, the pertinent question is raised by Mr. Werle whether it is not the province of the medical profession to lead the way to the new order, to heed the call to

the helm of socio-medical affairs, to seize the great opportunity for progress now lying before the profession.—The American Labor Legislation Review.

State Rights in Health Matters.

Whereas, There is a growing tendency in our National Congress to invade the authority of the States by the introduction of bills authorizing various departments of the Federal Government to exercise public health functions and duties properly belonging to the States, and

Whereas, There is an equally dangerous tendency in our own State towards the assumption by voluntary and irresponsible extra governmental agencies of powers and functions properly belonging to the legally constituted health authorities, therefore, be it

Resolved, That the Illinois Medical Society disapproves of any action whereby the Federal Government attempts to exercise authority over health matters in any State except insofar as questions of national or interstate importance are involved and that we urge that the regulations of all State health matters be under the direction of the legally constituted health authorities of the State as the representative of its citizens in health conservation, operation, and be it further

Resolved, That we condemn the principle of Federal State aid as pernicious and dangerous; that it is an encroachment on the functions of the State and an invasion of State authority tending to the demoralization of State Public Health work, rather than its development.

Resolutions Passed at the 70th Annual Meeting of the Illinois State Medical Society, Held at Rockford, May 1920, Against Compulsory Insurance and Allied Dangers.

Whereas, A goodly number of medical men of social standing have given endorsement to dangerous un-American schemes and allowed their names to be used on propaganda literature sponsored by parlor bolshevists whose energy and ambitions are directed towards Russianizing America at the earliest possible moment, and

Whereas, In most instances these endorsements have been given without proper consideration or investigation of

the subject matter endorsed, and while in most instances these medical men have withdrawn their support and endorsement after a thorough study and enlightenment on the subject, nevertheless such endorsements have proven valuable propaganda for the proponents of these dangerous schemes, the original impression lasting long after endorsements have been withdrawn, therefore, be it

Resolved, That the House of Delegates of the Illinois State Medical Society cautions the profession of the dangers of socializing propaganda with which the country is being flooded at the present time. That the House of Delegates express its disapproval of physicians lending their names to un-American schemes (so prevalent today), before they have thoroughly investigated same and studied the possible deleterious effect the passage of such laws might have upon the people and the medical profession, be it further

Resolved, That the House of Delegates of the Illinois State Medical Society again go on record as opposed to Compulsory Health Insurance, and that it reaffirm its resolution passed at the annual meeting of the Society, 1917, 1918, 1919, as follows:

"Resolved, That the House of Delegates of the Illinois State Medical Society go on record as being in favor of State Rights and expresses its disapproval of the attempt by the Federal government to usurp the functions and duties that legitimately belong to the several states, and, be it further

"Resolved, That the delegates from this Society to the House of Delegates of the American Medical Association be and hereby are instructed to oppose State Medicine, Compulsory Health Insurance, Nationalization of the City, County and State Health Agencies and allied dangerous bolsheviki schemes in the next House of Delegates of the American Medical Association, and to vote only for such candidates for offices of the A. M. A., as have pledged themselves to do all in their power both in Congress and in the several States of the Union to defeat all like visionary schemes that are being put forward at the present time."

Committee on Health Insurance of Illinois State Medical Society.

X-Ray and Laboratory

Robert H. Lafferty, M. D., Dept. Editor.

The success of the treatment of Hyperthyroidism by the X-ray is very striking. The nervous symptoms clear up, the heart rate becomes slower, and the general condition of the patient becomes much better.

At the Saratoga Meeting of the American Roentgen Ray Society last fall, Lichty, the well known internist of Pittsburgh, read an able paper dealing with this. It was published in the American Journal of Roentgenology for December and is summarized as follows:

1. Exophthalmic Goiter, or hyperthyroidism, from other causes, should be recognized early and treated promptly.

2. The earlier it is recognized the more likely medical treatment will be sufficient and will give permanent results.

3. The neglected cases or the cases having definite pathology besides, are likely to require surgery or X-ray treatment.

4. The X-ray treatment for the enlarged thyroid presents most attractive advantages but as yet the indications for its use do not seem so definite and the results are not so certain.

5. In hyperthyroidism the roentgenologist and the surgeon, at best, can only break through a vicious circle for which the internist may or may not have been responsible.

Boggs of Pittsburgh also at the same meeting presented a paper on the treatment of goiter by radiation, which is published in the same journal and is summarized as follows:

Indications for Roentgen or Radium Treatment.

1. All forms of exophthalmic goiter derive benefit from both forms of radiation and the symptoms can be relieved or the patient symptomatically cured in 80 per cent of the cases unless the disease is too far advanced. Nearly all cases can be both symptomatically and objectively cured.

2. The roentgen rays are useful in reducing the overactivity of the thyroid gland in exophthalmic goiter before op-

eration, where the tumor is large and the symptoms are so intense as to make operation dangerous. When given as an ante-operative procedure it is advisable to operate within four to six weeks before fibrous tissue formation has taken place.

3. In relapses after operation for exophthalmic goiter radiation should always be employed after a careful study of the ductless glands has been made, rather than the contemplation of a second operation.

4. Exophthalmic goiter in which other ductless glands play an important part, particularly if the thyroid is of small or moderate size, should be given radiation.

5. Adolescent goiter which do not respond within a reasonable length of time to medical treatment are benefited by radiation.

Contra-Indications for X-Ray.

1. Colloid, cystic, fibrous and nodular goiters.

2. Goiter causing marked pressure without toxic symptoms.

3. Intra-thoracic goiter.

In the discussion of the papers Holmes of Boston spoke of the importance of the basal metabolism tests in diagnosing and keeping track of the condition of the patient during treatment. He said in part: "The basal metabolism gives us a direct check on the amount of toxemia that the patient is suffering from, the amount of activity of the gland, and by having it done at intervals during the treatment we get a check on the result of our dosage, so we can increase it or decrease it as the case requires, and then by so following the case we know when to stop direct treatment of the gland. * * * * *

If you start treating with X-ray instead of surgery, there is a steady drop and they get normal about the same time the surgical case does. So that if you judge from end results, there is practically no difference in the forms of treatment. None of the cases showed an improvement from drugs alone."

Dr. Holmes reported the result of the study of these conditions at the Massachusetts General in the Journal of the A. M. A. Vol. 73.

ROENTGENOTHERAPY AND TRANSILLUMINATION.

The comparative value of roentgeno-

therapy and transillumination in the diagnosis of diseases of the frontal and maxillary sinuses is discussed by H. H. Briggs, Asheville, N. C. (Journal A. M. A., July 31, 1920). Which of the two is more valuable is debatable, depending on the anatomic relationship, the modus operandi, and on how much the observer has studied the various methods of each while comparing his diagnosis with his surgical findings. The one method supplements, frequently corroborates, and occasionally refutes, the findings of the other. If taken jointly, and in connection with other symptoms and signs, they often prove to be determining factors in establishing a diagnosis, and frequently suggest the proper therapeutic procedure.

Blood Platelet Count.

Gram has modified the Thomsen method in a way to bring this reliable technic for enumeration of the platelets within the reach of every practitioner. A 3 per cent solution of sodium citrate is poured in a Sahli glass to the mark 10, and then with a not too narrow, curved needle venous blood is run down into the citrate solution to the 100 mark. After shaking and setting aside for an hour, a small quantity of the citrated plasma is drawn off with an ordinary leukocyte pipet and diluted in the proportion of 1:20 with physiologic sodium chlorid solution and a few drops liquor formaldehydi per 100 c. c. Counting the platelets in five large squares in the Thoma Zeiss counting chamber, after waiting half an hour, gives the number of thousands of platelets per cubic millimeter of the citrated plasma. The number of platelets in the blood can be computed from this figure by multiplying with one of the constants in a short table which he gives. The constants range from 0.59 with 110 hemoglobin percentage, to 0.63 with 100; 0.68 with 90; 0.73 with 80; 0.78 with 70; 0.82 with 60; 0.87 with 50; 0.92 with 40; 0.97 with 30; and 1.01 with 20 to 1.04 with 15 per cent hemoglobin. He refers to his recent article in the Archives of Internal Medicine, March, 1920, which explains the importance of the platelet count in the diagnosis and prognosis of various diseases.

Hospitals and Sanatoriums

John Q. Myers, M. D., Department Editor

Minimum Requirements of the National Hospital Standardization Board Effective February 1, 1920.

1. That no physician or surgeon who divides fees be allowed to practice in the hospital.
2. That the staff file autopsy reports with the case records; that the senior house officer obtain permission for autopsy in house cases; that the medical attendant in private cases obtain consent of family for autopsy.
3. That the attending physician or surgeon or his assistant be required to be present at the autopsy of cases under his charge to observe the findings and confer with pathologist concerning the same.
4. That the pathological, bacteriological and X-ray findings be given to the record clerk as soon as completed to be filed with the patient's record after the discharge of the patient.
5. That the physical examination on ward patients be made and recorded by the house officer and that it be the duty of the assistant surgeon and physician to instruct the house officers in taking histories and making examinations, and that they be responsible for the same in their respective services.
6. That the attending physician or surgeon in private cases be held responsible for the records of his patients.
7. That the surgeon's pre-operative diagnosis be posted by the operating supervisor in operating room in advance of operation.
8. That the post-operative diagnosis must be recorded at the close of the operation.
9. That follow-up records be kept by the record clerk.
10. That throat smears and other examinations in regard to infection be made of all children admitted to the children's department. Vaginal smears shall be made in suspicious cases.
11. That it is the duty of the chiefs of service to instruct the house officers at the bedside upon the salient points of diagnosis and management of cases.
12. That the superintendent keep a record of the house officers regarding

their personal conduct and professional ability.

13. That a committee of five be appointed annually by the trustees on recommendation of the staff, and this committee shall require that the proper methods of efficiency be maintained throughout the hospital.

14. A meeting to be held each month of the entire group of physicians and surgeons who have treated cases in the hospital during the month preceding, a written notice to be sent all members of the group three days before the date of the meeting.

15. At these meetings, the clinical experience of the group in the various departments of the hospital shall be reviewed and analyzed, the basis of such review and analysis being the clinical records of all patients, both day and free.

16. That membership upon the group be restricted to physicians and surgeons who are competent in their respective fields and worthy in character.

17. A summary of the month's casualties, such as deaths, infections and complications, shall be prepared by the registrar of the hospital for the use and convenience of the group meetings, and this summary shall become a part of the permanent hospital records. The above summary shall contain the following data:

- a. Serial case number of patient.
- b. Name of physician or surgeon under whose service the casualty occurred.
- c. Percentage of casualties to the number of cases treated that month by physician or surgeon concerned.
- d. Nature of casualty, i. e., death, infection or complication, etc.
- e. Diagnosis, pre- and post-operative.
- f. Nature of operation if any.

18. Chairman of the efficiency committee, or in his absence some member of that committee designated by him, shall preside at the group meetings.

19. The secretary of the group shall be appointed by the chairman of the efficiency committee.

20. All tissue removed at operation shall be sent to the Pathological Laboratory.

Order of Procedure of Group Meetings.

1. Presentation of interesting pathological material collected through the month, with such remarks concerning same as pathologist deems helpful.

2. Reading of registrar's casualty report and discussion of same by physicians and surgeons responsible for the case or cases in question. The details as shown by the case histories and the testimony of those concerned should be carefully considered by the group in order that it be determined, as far as possible, whether the fault lay with the doctor, the patient, the disease or the hospital organization or equipment.

3. A report of the registrar of the month's follow-up work and discussion of same. The acid test for the determination of the result of treatment should be whether the patient is relieved of the symptoms for which treatment was sought. For purpose of group discussion, the relieved cases should be disregarded and the failures alone considered. To this end the registrar should promptly give the names of the unrelieved patients to the doctor concerned, that he may investigate and report at the next group meeting. A list of the failures reported during the preceding month should be given the chairman for presentation to the group.

4. Opportunity should be given for report of cases of special interest which have been treated during the month.

Nurses Corner

Edith M. Redwine, R. N., Dept. Editor

In a paper read before the Twenty-second Convention of the American Nurses Association and published in the current number of *The American Journal of Nursing* Frances J. Patton, R. N. of Atlanta says:

"Nursing is unquestionably one of the greatest vocations of the day and private nursing presents as great an opportunity as any branch of the profession. The increased opportunity for study of the sciences and the research work open to the nurse during her training, have done much to add to her prestige, and on account of the many advantages the schools offer and the honor attached to a professional career of this character, the field for opportunity is broadening each day.

Because of the many demands made upon the professional nurse there are certain essential qualities which she must bring into her work, but the successful private nurse's first requisite

must be "adaptability."

After many years of constant nursing I easily consider "private duty" the most pleasant branch of our work. It is true that institutional cases have many advantages over the typical home cases, and the personal responsibility while on duty in a hospital is less. It is also true that the rules and regulations enforced by hospitals relieve the nurse of much trouble in dealing with the oftentimes overly-anxious family of the patient.

In connection with private nursing, one of the most difficult problems the nurse has to deal with is "off duty hours". The ordinary complaint of patients against the nurse is that she will go out "every afternoon" not realizing that a nurse who remains on duty throughout the day and who is frequently called upon during the night, must and does lose much of her strength and vitality and is, therefore, not able either physically or mentally to give the type of service she should be able to render, provided she had the necessary relief from the sick room. There are cases, when the patient is very ill, where continuous service over a long period of hours is necessary. Then we have to depend upon some member of the family, an obliging neighbor, or a servant, to relieve us, and while we appreciate their efforts to help, we naturally are anxious and uneasy about our patient's condition while we are away from him, still it is absolutely necessary that the nurse have sufficient rest and recreation to be able to give her best service.

In my long and varied experience of private nursing, I do not recall but one case where I could not get sufficient rest. On this case I was relieved from 3 a. m. to 6 a. m. daily, and after five weeks of this kind of service, on an out of town case, upon returning home, I found to my horror that I had gained fifteen pounds in weight, consequently I suffered no ill effects from an average of 21 hours of daily service in the sick room.

At the present time there is a shortage of private duty nurses and of pupil nurses in our city. This fact is due to several causes; viz., a number are doing public health work, some are still in the Red Cross service, others are engaged in hospitals, many have become attached to doctors' offices, and schools, consequently there is a growing deficiency

in the number available for calls. The fundamental cause for this, as can be readily seen, is the long hours of duty in private nursing, which is also the determining factor against many young women entering training schools."

News Items

Mary Elizabeth Hospital, Raleigh, N. C.

Work is progressing rapidly on the new Mary Elizabeth Hospital. It is being built of red tapestry brick with green tile roof, and will have about forty private rooms. It will be equipped with modern push button elevator, electric call system, steam heat, dumb waiters, White Line sterilizers, and tiled floors. It will be modernly equipped for medical, obstetrical, and surgical cases, and will be privately owned, and conducted by Dr. Harold Glascock, Dr. Ivan Procter, and Dr. Amzi Ellington.

NEW HOSPITAL OPENED AUGUST 6TH AT CLIO, S. C.

Numbers of Doctors and Others Present for the Opening Meeting.

The Clio hospital formally opened its doors to the public August 6th with a delightful banquet. L. S. Presson, of Clio, S. C., had charge of the arrangements, and he is to be congratulated upon the excellent manner in which it was carried out.

Among the guests were the local ministers and doctors, besides many members of the medical fraternity from the adjoining counties in both North and South Carolina. Dr. Kenney, of Clio, acted as toastmaster. Dr. W. D. James, Hamlet hospital, Hamlet, N. C., read a very interesting paper on "Radium," and exhibited photographs of a number of cases. Several good talks were made among the most interesting were those of Dr. Evans, of Rowland, N. C., and Dr. Frank McMillan, of Red Springs, N. C.

On account of the heavy rain a great many could not attend. Those present were: Rev. Messrs. Brown, Sisk and Derrick, of Clio; Dr. Reese, Tatum, S. C.; Dr. Kenney, Bennettsville, S. C.; Drs. Frank and Luther McMillan, Red Springs, N. C.; Dr. Livingston, Gibson,

N. C.; Drs. Reedy, Andrews; Dr. Douglas Hamer, McColl, S. C.; Dr. James, Hamlet, N. C.; Drs. Reedy, Evans, Hamer, Mahoney and Webb, of Clio, S. C.; Messrs. D. F. Bundy, R. L. Kenney and H. L. Galloway, Clio, S. C.; Dr. Douglas Hamer, Jr., McColl, S. C.; Mr. John Civil, Columbia, S. C.

No expense has been spared in building and equipping this hospital, there being electric fans, steam heat and good ventilation in every room. An up to date X-ray laboratory has been installed and they are prepared to handle any work of this kind. The operating and sterilizing rooms are of the latest type. The hospital employes only graduate nurses, insuring the doctors and patients one hundred per cent of efficiency. The management is to be congratulated. It is the first hospital to be opened in Marlboro county and the use of it is extended to all reputable doctors. They may take their patients there and treat them, or have them in competent hands.

Dr. S. Arthur T. Pritchard and **J. L. Anderson**, Asheville, announce the early erection of a four-story brick fire-proof general hospital with 100 beds at a cost of \$100,000 by themselves and associates to be used for general medical and surgical cases.

Dr. Eugene B. Glenn, it is reported has completed the purchase of the entire stock of the Meriwether Hospital of Asheville. The hospital, however, will continue to operate just as it has been doing, supported by the same staff of competent doctors and surgeons.

Drs. A. J. Crowell, J. P. Munroe and **J. P. Matheson** of Charlotte have just returned from two weeks visiting the Mayo Clinic, then across the Great Lakes to Montreal, spending two days in the hospitals there and also finally a couple of days in New York.

The doctors report Montreal a beautiful city and a splendid choice for the meeting place of several medical associations. Among these will be the meeting of the American College of Surgeons in October. Representatives will attend this meeting from all states, countries and provinces of both North and South America.

One Canadian custom, especially of the Royal Hospital of Montreal which the doctors reported that attracts at-

tention is that there all of the cooking is done by the nurses under the direction of a competent instructor. These nurses during their course spend six weeks in the kitchen and from the kitchen are "graduated" to the serving kitchen and the preparation of trays.

The dishwashing only is done by maids.

The kitchens are large, well ventilated and scrupulously clean and really a show spot of the entire hospital. Yet with two maids and the instructor the nurses do it all.

Dr. J. E. Brooks, Blowing Rock, N. C. has been elected whole time county health officer of Chatham county. Dr. Brooks was the first superintendent of the State Sanitorium for Tuberculosis and is a gentleman of wide knowledge in sanitary matters.

Dr. J. L. Long, for some years Davidson county's most capable health officer, has resigned to remove to Raleigh and accept the similar responsibilities for Wake county, N. C.

Dr. Paul Octavius Owsley died at Asheville, N. C., July 8. Dr. Owsley was 46 years old and graduated from Johns Hopkins University in 1899.

Dr. Edward B. Smith, Marion, S. C., died at Centenary, S. C. May 25. Dr. Smith was 81 years old and graduated from the Medical College of Charleston in 1860.

Coloored Medical Association Meeting.

The thirty-first annual meeting of the North Carolina Medical, Dental and Pharmaceutical Association was held at Rocky Mount, June 29 and 30. Charlotte was selected as the place of meeting for next year, and the following officers were elected: president, Dr. William C. Strudwick, Durham; vice presidents, W. H. Williams, Goldsboro, and Peter W. J. Burnett, Rocky Mount, and secretary-treasurer, Dr. Clyde H. Donnell, Durham.

Physician Fined for Failing to Report Births.

The highest fine as yet imposed in a local court for violation of the state vital statistics law was imposed on Dr. R. W. Tugman, Warrensville, July 17. He is said to have been assessed \$50 and costs in two cases of failing to report

births when he was the attending physician. The case was aggravated by the fact that last summer Dr. Tugman was convicted and given a nominal fine and that in this instance prosecution was instigated only after repeated unsuccessful efforts had been made to get him to comply with the law.

Obstetricians and Gynecologists to Hold Annual Session.

The thirty-third annual meeting of the American Association of Obstetricians and Gynecologists will be held in Atlantic City, September 20 to 22, under the presidency of Dr. George W. Crile, Cleveland.

Climatologists Elect Officers.

At the annual meeting of the American Climatological and Clinical Association held in Philadelphia in June, the following officers were elected: president, Dr. Carroll E. Edson, Denver; vice presidents, Drs. Nelson Estes Nichols, Portland, Me., and Gordon Wilson, Baltimore, and recorder, Dr. Cleveland Floyd, Boston.

Railway Surgeons to Meet.

The thirtieth annual session of the New York and New England Association of Railway Surgeons will be held at the Hotel McAlpin, New York, October 19, under the presidency of Dr. William B. Coley, New York, chief surgeon of the New York Central Lines. Dr. George W. Crile, Cleveland, will deliver the address in surgery.

Cholera in Japan.

A press telegram from Tokyo states that 500 new cases of cholera had been reported in Japan in the previous week.

Prize Awarded to Inventor of Cinematic Amputations.

The Ribero prize of 20,000 lire was awarded recently by the Turin Accademia di medicina to Dr. G. Vanghetti of Empoli, Italy, for his method of cineplastics, the utilization of the muscles in the amputation stump to actuate artificial limbs.

Wanted—A good physician to locate in live town of 1100 in best section of N. C. Good practice already established but physician is permanently disabled. A good place for the right man. Address Charlotte Medical Journal, Charlotte, N. C.

The Robeson County Medical Society met in Rowland Wednesday, July 14th, at 10 a. m. Papers were read by Drs. N. A. Thompson, J. S. Norman, and W. E. Evans.

Funeral Honors to General Gorgas.

Unusual honors were paid July 9, at the funeral ceremonies of Major-General Gorgas in St. Paul's Cathedral. King George V was represented by Sir Thomas Herbert John Chapman Goodwin, K. C. B., C. M. G., D. S. O., and a salute of thirteen guns was fired as the procession started from Queen Alexandra Military Hospital. The procession was led by the Coldstream Guard band, followed by detachments from the Coldstream Guards, the Life Guards and other military organizations. Representatives from all the allied powers and from scientific organizations of England and the continent were honorary pallbearers.

Research Laboratories.

The National Research Council, in a bulletin just issued, lists more than 300 laboratories in the United States in which fundamental research is carried on.

Fred L. Seely, proprietor Grove Park Inn, Asheville, N. C., announces the immediate erection, equipment and opening of a hospital for crippled children at Asheville, N. C., to contain fifty beds and be free to crippled children without regard to residence. The institution, it is also stated, "will not ask the public for any donations whatever for running expenses," as suitable provision to meet the annual budget being provided by Mr. Seeley and his associates. Mr. E. W. Grove of Grove Chill Tonic and Grove Grippe Cure is associated with his son-in-law Mr. Seely in this kindly benefaction. Dr. (late Major M. C. U. S. Army) W. Pinckney Herbert will be chief surgeon and have with him a full corps of Asheville's leading doctors, including Dr. Wm. LeRouy Dunn late Lt. Col. M. C. U. S. Army.

The N. A. R. S. has been advised that 14 county societies in California have adopted resolutions within the last few months reading "That we favor the limitation of the administration of anaesthetics to regularly licensed physicians and surgeons."

Publications Received

"DIAGNOSIS AND TREATMENT OF BRAIN INJURIES With and Without Fracture of the Skull," by William Sharpe, M. D., Professor of Neurological Surgery, New York Polyclinic Medical School and Hospital Consulting Neurological Surgeon, Manhattan Eye and Ear Hospital, etc. etc. 760 pages, 232 illustrations. J. B. Lippincott Co., Philadelphia and London, Price \$8.00.

A very unusual work of considerable practical value and meets a real need in the profession.

Along with most branches of medicine recent years have shown wonderful developments in the diagnosis and treatment of brain injuries and lesions. The reader is impressed at the first glance with the fact that the author has been in the very front ranks among those who have been responsible for this development.

He divides his subject:

Part I. General considerations: Pathology, Diagnosis and Treatment; Operative Technic.

Part II. Brain Injuries in Adults: Illustrative cases.

1. Acute.

2. Chronic.

Part. III. Brain Injuries in Newborn Babies and Children. Illustrative cases.

1. Acute.

2. Chronic.

The treatment is given in general, and then in detail in each case, whether the expectant, palliative or operative.

A large number of individual cases have been presented illustrative of cases to be expected in the daily work of the general practitioner, the general surgeon, the obstetrician and pediatrician. These cases are grouped according to the pathology and also to the method of treatment. Not only does he report his "successful cases," but also the "poor results" with the idea that sometimes we learn more from failures than we do from successes.

One class of brain injuries very much neglected heretofore, namely intracranial hemorrhage in the newborn as the result usually of some form of dystochia, whether the delivery was with instruments or not, has in this

work been given very careful and explicit consideration with the detailed report of a number of cases,—the differential diagnosis considered and the pathology of the lesion demonstrated either at operation or autopsy.

Finally the condition of post-traumatic neuroses is considered in a special chapter with also a discussion and report of a number of illustrative cases.

"THE DUODENAL TUBE AND ITS POSSIBILITIES," by Max Einhorn, M. D., Professor of Medicine at the New York Post Graduate Medical School; Visiting Physician to the Lenox Hill Hospital, New York City. Octavo of 122 pages with 51 illustrations. Philadelphia and London. W. B. Saunders Company, 1920. Cloth, \$2.50 net.

This is the compilation of a series of lectures by the author on the Duodenal Tube, giving a full resume of what has been thus far accomplished by it. Its purpose is, as the author states:

(1) "To acquaint my colleagues with the actual facts obtained by the duodenal tube, in a manner that they can make use of them; (2) to facilitate the work of others who are willing to enter this field of investigation for further study.

First there is an historical sketch of the development of the duodenal tube and a description of the instruments used for obtaining the duodenal contents. Then a discussion of the analysis of the duodenal contents, the diagnostic import and the duodenal tube as a therapeutic means.

Miscellaneous

MEDICINE IN ARMENIA AND SYRIA.

Medical relief work in the Near East presents many vexatious problems. The Acorne, official organ of the Near East Relief in Constantinople, devotes space in each number, to a discussion of these difficulties, in order that physicians in one district may learn how their problems were solved by relief-workers in another. Dr. John W. O'Meara, graduate of Harvard Medical College, and formerly of Worcester, Mass., wrote in the last number of the Acorne:

"Judging by those seen in clinic and hospital, I should say that more than half the people in the Caesarea district have roundworms. Santonin, said to be a reliable vermifuge, I have found worthless (using it in doses up to five grains, repeated two and three times). In a dozen instances at abdominal operations, I have seen intestines lined with the parasites, containing thirty to fifty at least, yet when full doses of this vermifuge were given later, and usually repeated, each time the details of a well-recommended routine being carefully observed, not more than three or four worms have been obtained. In the clinic, where therapeutic details have to be left to the patient, results are even more discouraging. I am trying to get hold of a better drug than Santonin.

"For favus, the natives here shave the heads and paint on a thick layer of pitch, which is removed in one piece, preferably under anaesthesia, in from ten to fifteen days. The idea is to have the hair grow into the pitch and be removed with it. It seems good in theory, but thus far I have not made sufficient experiments with the treatment to judge as to its efficacy."

Near East Relief workers say that one of the great handicaps in the medical relief work is the native doctor. He usually refuses to perform operations, leaving it to the barbers as in days of old. Infections of the worst sort result, and nurses with the organization are kept busy caring for the ills developed from "barber operations."

THE ALMOND AS AN ALL-YEAR-ROUND FOOD STAPLE.

The exigencies of the great war have compelled all nations to study nutritive values and the economics of food more critically than ever before. Every available source of food supply is being drawn upon to the fullest possible extent by the nations of the world.

In some instances, efforts have been made to extract nutrient material from even straw and sawdust, of course without success.

Leaders are following these researches and discussions with great interest. Numerous important facts in relation to human nutrition which have been long known to scientists but of which the common people have been ignorant have been brought to the attention of the hungry masses and have re-

ceived practical application in the masterly efforts which have been made for their relief.

One of the most striking facts upon which the public attention is focused is the constantly increasing scarcity of flesh foods. The reason is obvious when you study farm conditions and note the densely populated cities recorded by the latest census.

It is a fact that one acre devoted to wheat will produce nearly ten times as much protein, one of the most essential of all food principles, as the same area of land devoted to pasturage for beef cattle.

The same land devoted to the growing of almonds will produce an even greater amount of food protein together with other essential food principles.

In the discussions of food supplies the almond is gaining favor as a national food staple. Experts agree that the only reason almonds have not been used in America as a daily article of diet is the fact that they have been considered a luxury rather than a staple article of food; but as the public becomes better informed respecting the high food value of almonds and especially in view of the steadily rising cost of flesh meats, they are certain to gain higher appreciation.

DIPHTHERIA AND SMALLPOX.

Epidemics of diphtheria are usually initiated by the opening of the public schools. The incidence of the disease increased until November, remains at a maximum until January, and then slowly declines. And while the danger from diphtheria is much less than it was twenty-five years ago it is still a source of hazard to children of school and preschool age especially.

More than 250,000 cases occur annually in the United States, and of this number more than 10,000 die. Only in that period immediately following the introduction of antitoxin was there any marked decrease in the case occurrence and mortality rate. Without denying the progress which has been made in the control and prevention of the disease, it cannot be said that we have advanced as far as we should with endemic diphtheria. The largest single factor responsible for the stability of the morbidity and mortality percentages is the ignorance of the public on the benefits to be derived from the use of anti-

toxin both as a therapeutic agent and as a prophylactic agent for those recently exposed. The recognition of the importance of medical attention by the laity in every case of sore throat in a child and **prompt** use of **sufficient** antitoxin by physicians in every case which simulates diphtheria would do much to reduce this factor in the death rate to small proportions.

The Stone Will Stick on Wilder's Head.
(Clipped from "Tonics and Sedatives" in J. A. M. A. July 17, 1920.)

Mark Carroll of Blacksburg, came to this city yesterday and received treatment with the madstone at the office of H. M. Wilder, corner of Tryon and Third streets. The stone stuck to him for a period of 30 minutes, Dr. Wilder reports.

He brought with him in the automobile Robert Moss, aged two years, a war baby, whose mother is dead and whose father was killed in France. The little fellow also had the madstone applied to him, but it failed to stick.

Significance of Etiologic Factors in Treatment of Peptic Ulcer.

Laboratory investigations in 2,168 definitely proved and not "clinically surmised" cases of peptic ulcer have revealed these facts: Of this number, fifty-six patients, 2.6 per cent, has gastric contents containing no free hydrochloric acid; 499 patients, 23 per cent, had free hydrochloric acid values within the normal range (40 to 50, Topfer scale) and in 723 patients, 33.4 per cent, the free hydrochloric acid values were greater than the so-called "normal." These investigations show that in no form of gastric disease can the acid values be considered as indicating the causative factor of the disease, or that such acid variations are consequent on that disease; that, in health, the range of acid values in gastric juice is wider than is that of any of the values which formerly were supposed to be indicative of, or consequent on, gastric malfunction. With the purpose of further emphasizing the necessity for considering, chemically, the significance of etiologic factors in the treatment of peptic ulcer, and with the object of demonstrating the need of strict individualization in any ulcer regimen, Frank Smithies, Chicago (Journal A. M. A., June 5, 1920), analyzed 500 gastric ulcers. These ul-

cers were proved to exist actually by objective data, namely, from surgical, roentgen-ray and pathologic studies. In the group of infectious origin there were 173 cases; arteriosclerotic, 77 cases; visceral hypertonia, 68 cases; chronic anemia (so-called "chlorotic"), 61 cases; syphilitic, 41 cases; visceral hypotonia, 27 cases; postoperative, 27 cases; industrial intoxication, 22 cases; metabolic dysfunction, 18 cases, and traumatic (abdominal injury from blows, falls, etc.; intragastrically, foreign bodies), 8 cases.

Heart Diseases as a Public Health Problem.

Among 5,000,000 men of military age, more than 200,000 were disqualified for service because of heart defects. In one of the large and carefully managed life insurance companies, during the period from 1915 to 1918, the rate of rejection for heart defects was 24.4 per thousand, in spite of the fact that persons with the more obvious forms of heart disease are not likely to apply for insurance. A report of the department of health of New York City, covering over 250,000 examinations made by school medical inspectors during the year 1918, revealed an incidence of heart defects among schoolchildren of 1.6 per cent. An analysis of the mortality statistics of 1,066,711 deaths shows that diseases of the heart were responsible for almost one eighth of the deaths of all ages and for almost one-fifth of the deaths in persons of 40 years of age and over. Lewis A. Conner, New York (Journal A. M. A., June 5, 1920), states that the movement, which is now gathering headway, for the improvement and coordination of existing agencies for the relief of sufferers from heart disease and for arousing interest and co-operation in the problems of prevention has come into existence not so much because of the frequency of cardiac disease as because of the conviction that the present methods of dealing with the problem involve enormous economic waste and immeasurable suffering, much of which is unnecessary and preventable. Conner details the aims, objects and activities of the Association for the Prevention and Relief of Heart Disease of New York. Briefly, its accomplishments up to the present time may be thus outlined: 1.

The encouragement of the formation of special cardiac dispensary classes. 2. The increasing of facilities for the care of suitable heart patients in convalescent homes. 3. The arousing of greater interest in the welfare of schoolchildren with heart disorders. 4. The accomplishment of a good deal individually by the social service workers in the various dispensary heart classes, in the matter of providing heart cripples with more suitable occupation. A great part of this burden has been taken over by the Employment Bureau for the Handicapped, maintained by the Hospital Social Service Association. Special heart clinics are also in operation in Boston, Chicago and other cities, and the formation of a national organization dedicated to this object would seem to be the next logical step.

Radium Treatment of Chronic Leukorrhea.

In a series of forty-six cases reported by Arthur H. Curtis, Chicago (Journal A. M. A., June 19, 1920), the patients were subjected to a thorough pelvic examination, the reaction of the discharge tested, smears obtained from the cervix and vagina, and a set of cultures made. Gross pathologic lesions were corrected surgically. The usual hygienic measures were instituted. The most usual and most difficult focus to eradicate lies in the endocervix. Unless the discharge is essentially of vulvovaginal origin, radium is advocated in all severe cases of persistent chronic leukorrhea. After thorough dilatation, the cervix and fundus may be curetted for diagnostic purposes. Fifty mg. of radium, preferably two 25 mg. tubes in tandem, are introduced high into the cervix, held by a suture passed through the external os, and left for several hours. One or more subsequent radium treatments of shorter duration may be required. It is best to plan on an interval of from ten to twelve weeks between applications. Each radium tube employed in the treatment of this series of cases was screened by a double gold capsule with a total thickness of 2 mm. The capsule in turn was incased in dental rubber. Examination of cervical tissues after successful radium treatment reveals atrophy of the glands, relative increase in fibrous tissue, and disappearance of microscopic evidences of infection. Skene's ducts harbor the

next most important focus. At the time of radium application, or under procain anesthesia, the blunt end of a needle, held in forceps, is threaded into the duct so that the needle head protrudes into the vagina. The duct is split with a knife and the tract fulgurated. Bartholin duct infection may be eradicated by similar treatment. Infected Bartholin glands rarely require excision. The urethra is occasionally treated by dilatation, aided by instillations of weak silver nitrate solution. Twenty-five patients were cured; 7 were improved; 4 were not improved; in 10 cases no report can be made as yet.

Results of Exposure of Animal Ovaries to Radium.

Experiments on rabbits have convinced John M. Maury, Memphis, Tenn. (Journal A. M. A., June 19, 1920), that a 600 mg. hour dosage of radium does not produce degeneration of the follicles of the ovaries.

Paraplegic Multiple Sclerosis.

Answers to a questionnaire sent by Archibald Church, Chicago (Journal A. M. A., June 12, 1920), to a limited number of American neurologists disclosed the fact that these neurologists are seeing more cases of paraplegic multiple sclerosis than formerly, and that they now recognize the formes frustes and aberrant types with a readiness that is somewhat of a recent acquisition. In the last three years, Church has seen thirty-two cases in private practice alone. He states that considering that the lesions of multiple sclerosis are extremely widespread in the brain and spinal cord, without symmetry or systematization, it is quite surprising that the original clinical conception should have prevailed so completely and persisted so long. In many cases, symptomatically at least, the brain seems quite exempt; in others the cord is not materially disturbed; but in all, sooner or later both are implicated. Contrary to early descriptions, sensory disturbances, both subjective and objective in character, are not at all infrequent in this type of multiple sclerosis. Hypesthesia and girdling sensations of segment level distribution of very definite and persistent character have more than once given rise, in conjunction with other paraplegic features, to a diag-

nosis of pressure on the cord. Among the signs of the disease, when affecting mainly or only the lower extremities, are the pathologic reflexes—ankle clonus, Babinski's toe sign, intensified knee jerks, and last and most important of all, one-sided, partial or complete abolition of the umbilical reflex. An interesting and instructive observation is furnished by the lack of uniformity with which the reflexes are modified on the two sides. The sphincter control in the late stages is not rarely weakened, and actual incontinence may occur. To the lower level symptoms of the paraplegic type there are commonly added some of the cephalic manifestations of cerebral participation. Squints, double vision, marginal optic atrophy, irregularities of the visual field, cerebellar symptoms, intention tremor, speech defects, and even mental peculiarities are, some or all, in slight or marked degree, sooner or later observed. The condition, therefore, as in all other manifestations of multiple sclerosis, becomes progressively worse, and complete disability the ultima. Fortunately, the patients suffer little, aside from the growing feebleness and helplessness, to which they progressively adjust themselves, and the disease does not in itself appear to be fatal. The treatment of multiple sclerosis is a frequent source of disappointment.

Arterial Hypertension Associated with Endocrine Dyscrasia.

In an analysis of more than 500 endocrine cases observed by William Engelbach, St. Louis (Journal A. M. A., June 12, 1920), during the last four years, it was found that forty-six, or about 10 per cent, had a blood pressure of above 160. Those cases in which a diagnosis of nephritis or arteriosclerosis was suspected were excluded. Of the forty-six, the highest percentage of arterial hypertension was found among the pluriglandular dyscrasias. Fourteen of the forty-six, or 30 per cent, were classified as having more than one gland involved, with none so sufficiently dominating the picture or initiating its course that it might be considered the primary secretory disturbance, with the other glands classed as secondary. Combinations of the pituitary and thyroid hyposecretions were present in twelve cases, or about 26 per cent, of the hypertensive cases. The next highest percentage, eleven cases, or one-fourth of the entire

number, occurred at the menopause. In cases in which there were glandular disturbances apparent in this group, they were merely considered as a part of the climacteric. For instance, in four there was evidence of hyperthyroidism; in three, hyperthyroidism, and in two, hypopituitarism. Of the primary gonad insufficiencies, there were four cases, or 9 per cent; one in a eunuchoid person, two in a late, and one in an early castrate. The next in frequency was the thyroid group, with eight cases, or 17 per cent, classified as pure hypothyroids, and four, or 8 per cent, as hyperthyroids. The pituitary group ranged lowest in number, five cases, or 11 per cent, being classified as simple dyscrasias of this gland. Of this number, four were hypopituitarism and one hyperpituitarism. One of these was a case of pituitary hibernation, one a case of pituitary headache (both reacted to substitution pituitary treatment), one a hypophysial glycosuria, and two eunuchoid giants. Cases are cited, and the literature on arterial hypertension associated with endocrine dyscrasia is reviewed.

FATALITIES FROM LOCAL ANESTHETICS.

Nothing in medical practice is more serious than the death of a patient within two or three minutes after the injection of a local anesthetic, especially when the patient is in excellent health except for a condition requiring some minor operation. In view of the frequent employment of local anesthesia, it is apparent that even though the relative number of such accidents is low, in the aggregate the problem merits serious study. Efforts to reduce the dangers arising from the administration of local anesthetics have been hampered by limited knowledge as to the cause and mechanism of these unfortunate occurrences. From time to time appeals have been made to the profession at large to report the clinical manifestations following the injection of a toxic anesthetic, but the response has been poor. The Council on Pharmacy and Chemistry therefore asked the Section on Laryngology, Otology and Rhinology to appoint a special committee to make a comprehensive study on the use of anesthetics in nose and throat work. The summarized report of this committee appears elsewhere in this issue.

As is pointed out, the occurrence of twenty deaths in the personal experience of 100 operators shows that the subject deserves more earnest attention. Real progress, however, can be made only if cases are reported promptly and with attention to the factors that are in question. As an illustration of the immediate practical benefit that could follow this inquiry, it is worthy of note that a fourth of the deaths so far reported to this section arose from mistake in solutions. These can probably be avoided by preparing the cocain solution only as needed, from tablets colored with distinctive dye so that the tint of the solution at once would call attention to the drug and its concentration. Physicians are urged to co-operate by reporting cases of idiosyncrasies, to the end that further study will result in definitely establishing the causes of sudden death, and that a better understanding may be attained as to the proper technic and proper choice of local anesthetics for each particular class of cases.—*Jour. A. M. A.*, July 31, 1920.

THE NURSING PROBLEM.

In his series of articles on Central and South America, the first which appear in the *Jour. A. M. A.*, July 31, 1920, Dr. Mayo calls attention to the nursing problem as he witnessed it in the Canal Zone. He speaks as one who has intimate knowledge of the value of the trained nurse and also as one who has observed the serious effects of the shortage of nurses for the general public. He emphasizes the fact that a highly trained nurse is not necessary in the vast number of cases of ordinary illness. What is needed in such cases is an intelligent woman who has knowledge of the ordinary elementary facts of hygiene and care of the human body combined with good common sense. As Dr. Norman Bridge recently said in his commencement address before the graduates of Rush Medical College: "Any bright girl can be taught in sixty days to take temperature, pulse and respiration accurately, to prepare and administer invalid diet, to administer drugs in numerous ways, to give baths and fomentations, and attend to the personal wants of the invalid and to keep accurate records of the patient, and of her own doings."

SURGERY OF CANCER OF LARGE INTESTINE.

In the absence of a palpable tumor Arthur Dean Bevan, Chicago (*Journal A. M. A.*, July 31, 1920), is convinced that the roentgen ray is absolutely essential to determine by the presence of a filling defect the location of the neoplasm, and it is of great importance in the subsequent management of the case, in determining the shape and location of the abdominal incision. In the overwhelming majority of the cases careful roentgen-ray examination, fluoroscopic and plate, give definite and absolute evidence of the existence and location of the carcinoma of the colon. In severe cases of carcinoma, at the hepatic and splenic flexures the overlapping of the shadows of the barium in the bowel makes it impossible to see any filling defect, and even in fluoroscopic examination it may be difficult to demonstrate any abnormality. Cases of this kind, however, are the exception and not the rule. Bevan is also convinced of the great value of preliminary colostomy in the presence of obstruction. The operation is usually performed under local anesthesia. In the technic of removing carcinoma, the importance of three basic principles is emphasized. 1. All of these cases can be best handled through four different incisions, namely, a muscle-splitting incision like an appendix incision on the right side; a similar one on the left; a large S-shaped incision on the right side, and a similar one on the left. 2. It is essential in the removal of any portion of the large intestine from the cecum to the rectosigmoid to mobilize very fully that section of the bowel which is involved in the process and in the operative procedure. 3. The third basic principle is the importance of a side-to-side anastomosis in big bowel surgery. The mortality is about one-half as great in properly performed side-to-side anastomoses as in properly performed end-to-end anastomoses of the large bowel. A three-step operation in the presence of obstruction is preferred by Bevan to the Mukulicz operation. It secures immediate relief from the obstruction, it enables us to make a much more radical operation of resection of the carcinoma than does the Mikulicz, and it is much more satisfactory to the patient than the Mikulicz plan. It con-

sists in: (1) establishing a colostomy; (2) resecting the tumor, and (3) closing the artificial anus.

THE FUMES OF IODIN.

One of the important factors connected with therapeutics as a science is the method of administration of medicinal substances. Drugs may be given by mouth, by hyperdermic or intravenous injection, by inhalation, by inunction or, less frequently, by the use of other entrances into the body. In choosing a method, the physical characters of the substance on the body tissues with which it may come in contact must be especially taken into consideration.

These factors apply particularly in the case of substances like iodine, arsenic, mercury or the biologic products in which the mode of administration radically modifies the action. For some time manufacturers have urged substitutes for tincture of iodine, claiming that their substitutes were free from the undesirable properties of the tincture, and, at the same time, possessed special virtues which the tincture could not possess. More recently, attention has been directed to the administration of iodine in the form of vapor. The diffusing and penetrating powers of gases have particularly attracted the attention of therapeutists, since by this method drugs may be applied to rather inaccessible portions of the body, such as the lining of the lungs, the throat and the mucous membranes of the genito-urinary tract. Furthermore, it has been asserted that iodine in the form of fumes has increased combining powers, and is thus far more potent in effect than iodine administered by any other route. There do not seem to have been any adequate scientific investigations of the subject, however, until the recently published results of Luckhardt and his collaborators¹ at the University of Chicago. In their experiments, both on man and on animals, accurately determined quantities of iodine were vaporized in a special device, and the fumes applied to the skin. At the same time, the tincture was applied to the skin of other persons as a control. Iodine was also applied to the skin of dogs with hyperplastic thyroid glands, and the effects on the gland, before and after administration, studied. Dogs were also used to determine whether iodine fumes were absorb-

ed from the lungs. As a result of these investigations, which are reported in great detail, it was found that iodine, when deposited on the skin in the form of fumes, is absorbed. More iodine was recovered from the urine, following the application of the tincture, than was recovered following the use of the fumes. This result is explained by the authors on the ground that the iodine so deposited was held in combination with the protein during the process of coagulation of the latter by the alcohol of the tincture, leading to a state of continuous absorption. It is probable, furthermore, that the iodine deposited on the skin in the form of fumes is re-vaporized to some extent by the heat of the body.

Most important were the effects of iodine administered intratracheally in the form of fumes. Iodine given in this way seems to be rapidly and completely absorbed; but it was found that the administration of the fumes of iodine by inhalation through the respiratory passages, even in small quantities, is fraught with great danger. Such administration induces dyspnea; and when it is given in large quantities, acute and fatal pulmonary edema ensues within twenty-four hours. When respiratory disorders are present at the time of administration, the fatal edema supervenes very quickly. Thus far, no device designed to deliver fumes controls the dosage.

It is interesting to consider, as do the authors, the fact that the fumes of iodine have the same effect as those of two other halogens, bromine and chlorine. The results of these experiments with iodine fumes on the dog, as shown by necropsy findings, are practically identical with those reported by military surgeons as found in soldiers gassed with chlorine during the war.

The results of these researches are additional evidence as to how scientific research may confirm or deny conclusions based on empiric therapeutic observations. The work may well serve as a model for similar experiments, now being made, on the therapeutic use, intravenously, of such substances as non-specific proteins or organic preparations of toxic drugs. The patient should at least have the chance that is afforded him by preliminary experiments, scientifically performed on animals in the research laboratory.—*Jour. A. M. A.*

THE TREATMENT OF SYPHILIS.

A very valuable and interesting work has just been published by The Macmillan Co., New York. It is entitled "The Treatment of Syphilis," and is from the pen of H. Sheridan Baketel, A. M., M. D. The volume covers very thoroughly and convincingly the field of intravenous and intramuscular medication, and the administration of arsphenamine or nearsphenamine. It gives in minutiae, step by step, the proper methods for the actual introduction of arsenical products into the system.

Speaking of the after treatment in cases where intramuscular injections have been given, the author says:

"In England and on the Continent it is the habit, after giving an intramuscular injection, to cover the surrounding parts with sterilized absorbent cotton fixed with elastic collodion. The patients were instructed to rest in bed for twenty-four hours and, according to various reports, the majority of them complained only of stiffness in the hip and thigh and occasionally of pain in the lower extremity.

"Some physicians also utilize a clay dressing, like antiphlogistine, in place of cotton. It is their custom to cover the entire gluteal surface with a thick layer of properly heated antiphlogistine and to cover this with gauze, and over that absorbent cotton. This application seems to work well following the intramuscular injection and, not only aids in the prevention of pain and to a considerable extent prevents any abscess formation, but enables the patient to attend to his ordinary affairs."

Dr. Baketel is Professor of Preventive Medicine and Hygiene and Lecturer on Genito-Urinary Diseases and Syphilis in the Long Island College Hospital, Brooklyn, N. Y.; Attending Syphilologist and Chief of Clinics at Volunteer Hospital, New York; Genito-Urinary Surgeon to the House of Relief of the New York Hospital; Lt. Col. Medical Reserve Corps, U. S. Army, etc.

Colonel Russell Resigns to Take Up New Duties.

Col. F. F. Russell has resigned from the Medical Corps, U. S. Army, to take charge of the newly organized Division of Public Health Laboratories of the International Health Board of the Rockefeller Foundation. Colonel Russell's

resignation from the army is to be regretted so far as the medical corps is concerned. He has been recognized as one of its most efficient officers; he has the rare combination of scientific spirit and executive ability and through this combination has accomplished much. He has developed and stimulated the scientific spirit in others so that the accomplishment of the army in scientific matters has been by no means inconsiderable. In 1908, Colonel Russell introduced prophylactic vaccination against typhoid fever in the army. The well-known Russell double-sugar medium was a product of this period, and was a product of this period, and was the first instance in which more than one indicator of the bacterial action was used in the same tube. In 1903, he collaborated with Hiss in the study of dysentery bacilli, and described the organism later known as the Hiss-Russell, or "Y," type of the dysentery bacillus. On the death of Major Carroll in 1907, Colonel Russell was placed in charge of the laboratories of the Army Medical School, with which he has been more or less associated ever since. In 1912, Colonel Russell went to Porto Rico to assist in suppressing an outbreak of plague. In 1914, he went to Vera Cruz as a member of the expeditionary force and directed the laboratory service of the medical department. In 1915-1917 he served in the Canal Zone and planned and built the model board of health laboratory. In administrative lines he has been especially active in building up the Army Medical School and department of laboratories from the point of view of equipment, personnel and output. For some years he had advocated the placing of the school on the grounds of the Walter Reed Hospital, and the development of a symmetrical scheme for graduate medical education, combining both hospital and laboratory facilities. This project is about to be realized, largely through the active support of Surgeon-General Ireland. While there is universal regret in the medical corps over the loss of Colonel Russell's services to the army, it is realized that his ability and his army experience will be especially valuable in his new position. He will retain a commission in the reserve corps.

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the only thing convenient at the moment. Intended it for a temporary dressing until the ordinary substances used in such cases could be obtained. The relief was so great and instantaneous that the dressing was allowed to remain until a later visit, when upon its removal twelve hours after, the skin was found to be white and free from inflammation. Another application was allowed to remain for twenty-four hours. When discontinued there were no blisters, no redness, nor any evidence of the burn, excepting the eyelids and around the eyes where the Antiphlogistine had not been applied. Have used this preparation again and again in burns of the first degree with invariably good results."

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NATIONAL ANAESTHESIA RE- SEARCH SOCIETY.

Current Information.

Dr. Arthur E. Guedel of Indianapolis writes:

"The Indianapolis Society of Anaesthetists met last night for the first time since the war. The outcome of the meeting was that the aforesaid society insists upon joining the N. A. R. S. as a body."

Dr. Guedel advises that there are nine men in Indianapolis giving their entire time to anaesthesia. He says further that a gas apparatus for obstetrics is present in every hospital delivery room in the city, and that the M. D.'s are learning to use it.

The recent bulletin of current information in re full professorship of anaesthesia at the University of Maryland has elicited the following from Dr. Charles Chassaignac of New Orleans Polyclinic. Dr. Chassaignac says:

"I beg to call your attention to the fact that this school has for a number of years had a branch devoted entirely to anaesthesia under the direction of Dr. Carroll W. Allen, and this year his ranking has been raised to full professorship."

The N. A. R. S. is glad to give currency to this information, and hopes that there may be other full professorships still to be heard from.

The N. A. R. S. is collecting complete data on the instruction offered by the schools of the United States on the subject of anaesthesia.

The questionnaire on the use of nitrous oxid oxygen in obstetrics recently put out by the N. A. R. S. has been exhausted without reaching all the profession who might be able to supply desired information.

A reprint has been ordered, and copies will be available in a week. Copies may be had for the asking from the Executive Secretary.

The Society is preparing a substantial cardboard folder as a container for its bulletins on anaesthesia. Those will be sent free to all regular members and on application to hospitals, libraries, and other organizations receiving bulletins for reference purposes.

H. C. Macatee, recording secretary of the Medical Society of the District of Columbia, advises that at the May meeting of that organization, the following resolution was adopted:

"Resolved, That the Medical Society of the District of Columbia go on record as in favor of the limitation of the practice of anaesthesia to regularly licensed physicians and surgeons and dentists, and graduate nurses in cases of emergency or medical students for the purposes of instruction."

Dr. S. Griffith Davis, of the Research Committee of the National Anaesthesia Research Society, advises that the University of Maryland, which several years ago created a separate department of anaesthesia and put him in charge with the title of associate professor, has now realized the importance of the work and given him a full professorship. So far as records are available, this is the first professorship of anaesthesia to be created in the United States. Dr. Davis ventures to hope that other schools will soon follow the example set by the University of Maryland.

The Executive Secretary is privileged to announce the addition of two of the most eminent scientists in America to membership of the Research Committee of the National Anaesthesia Research Society. These are Dr. Yandel Henderson of Yale University and Dr. Charles H. Baskerville of the University of New York city. The society has also received the membership of several distinguished doctors, surgeons, and anaesthetists of the Dominion of Canada.

Radium Treatment of Cancer of the Esophagus Under Roentgen- Ray Control.

The action of radium on malignant tissue is discussed briefly by R. W. Mills and J. S. Kimbrough, St. Louis (Journal A. M. A., June 5, 1920), and its use in cancer of the esophagus in greater detail. The problem offered by carcinoma of the esophagus is quite different from that of other malignant conditions in which favorable results have been obtained. The exact thickness of the tumor is unknown and usually not uniform. Not only is there no surrounding tissue of a protective nature, but instead, the thin-walled esophagus is in

Pond's Extract

Regular sponging of the whole body every few hours with Pond's Extract, full strength, is one of the most effective means at the physician's command for relieving and preventing excessive sweating. The tonic action on the skin is pronounced and goes far to add to the patient's sense of comfort and well-being.

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Profuse Sweating

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It is particularly useful in the treatment of the very young.

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Valuable In Prostatitis-Pyelitis-Cystitis-Enuresis

In Dysuria-Albuminuria

In Irritable and Weak Bladder Conditions

AS A SOOTHER AND MILD DIURETIC

DOSE:—One Teaspoonful Four Times a Day.

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WANTED—An experienced trained nurse to act in the capacity of head nurse and matron in Glenwood Park Sanitarium. W. C. Ashworth, President, Greensboro, N. C.

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A Physiologically Correct
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Samples on request
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contact with vital structures whose devitalization may lead to ulceration and perforation. The situation of cancer of the esophagus renders exact centralization of application and protective procedures mechanically difficult. Esophagoscopy has heretofore been utilized by some to accomplish certain ends, but the use of the roentgen-ray study of the position and physical peculiarities of the tumor is made by both screen and plate, a simple mixture of bismuth subcarbonate in water being used as a means of visualization, and when the stricture is not great, bismuth suspended in artificial buttermilk. The patient is given a preliminary injection of morphin and atrophin one-half hour before the radium treatment is begun, the dose obviously as indicated. It is impossible to over-estimate the value of this procedure in quieting the patient and making the endurance of a six-hour application possible without undue suffering. Occasionally, in marked strictures, a spoonful of olive oil one-half hour before treatment is helpful in relaxing secondary spasm. Preliminary bouginage is occasionally useful. The radium enclosed in a container composed of German silver 0.5 mm. in thickness and further filtered with 0.5 mm. of brass and a thickness of rubber is mounted as a terminal on a slightly springy drawn silver wire encased in a rubber tube. It is introduced after the manner of an ordinary esophageal sound. The wire applicator or stomach tube bearer is anchored by means of a bridle bandage about the patient's head. The radium is left in situ for six hours at each initial treatment. Cases were treated on from one to seven occasions. The frequency and number of treatments and the length of other than the initial treatment was occasionally varied somewhat to meet individual indications, also as much as was thought advisable in an effort to determine the most effective procedure. Nearly all the authors' work has been done with 50 mb. of radium element. The immediate results of the treatment were in dysphagia. No case treated failed of improvement in this regard. The improvement in several was almost immediate, within twenty-four hours, possibly owing in part to a bouginage action of the radium capsule. A gain in weight occurred in most cases. In several cases there was a return in a degree of the dysphagia, usually relieved by another

treatment. The re-established dysphagia in some instances seemed of the nature of intermittent spasm. Eleven cases are cited.

"Addiline," Advertised Widely as Remedy for White Plague Consists of Petroleum and Turpentine. Worthless as Tuberculosis Remedy, But May Make Good Furniture Polish, Is Chemist's Report.

With photographs showing the different stages of gain in weight the advertisement of the Addiline Company. No. 32 Arcade Building, Columbus, Ohio, tells the story of J. H. Miller, Ohio druggist, who began experimenting on himself and discovered the home treatment known as "Addiline." According to the advertisement it was not until the physicians said it was impossible for him to survive the ravages of tuberculosis that Miller plunged into the depths of research.

He emerged from this deep study in a short time with a concoction composed of kerosene in large proportions with a smaller amount of turpentine. The only other ingredient being a small amount of aromatic oil.

It is absolutely preposterous to suggest that a remedy of this kind can be of any benefit in the treatment of tuberculosis. In fact, it is the opinion of the Bureau of Tuberculosis of the North Carolina State Board of Health, that the effect, if taken internally, may be decidedly dangerous. Used externally it would be of no more value than ordinary turpentine and could be purchased at the drug store for 35 cents, whereas the Addiline Company charge \$5.50 for it.

So sanguine and ever-expectant of cure are the victims of tuberculosis that any treatment whatever acts with strong suggestive force upon them for a time. For this reason it is the duty of the press, and every other medium of public information, to protect the people from exploitations of this kind. In fact few publications will accept advertising of this type as they fully realize that advertising of this kind is confidence-destroying.

Tuberculosis is curable—and better still it is preventable. But the only known cure for tuberculosis at this time is rest, fresh air and nourishing food, the greatest of these being rest. A competent physician is indispensable.

HAY FEVER AND ASTHMA

Successfully treated with *RESPIRAZONE-TILDEN'S*

Allays hypersecretion, subdues inflammation, relaxes muscular tension and possesses the necessary alterative power to produce proper resolution of the inflammatory exudates.

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Manufacturing Pharmacists Since 1848

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DYSMENORRHEA
MENORRHAGIA
METRORRHAGIA
ETC.**

ERGOAPIOL (Smith) is supplied only in packages containing twenty capsules.

DOSE: One to two capsules three or four times a day. < < <

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We received recently the following communication from Dr. W. H. Mayfield, Louisville, Ky.: "I have been using Eucalyptus, depending upon our drug stores which have been furnishing me the commercial article which is of uncertain strength, and disappoints."

To guard the high reputation our product has acquired all over the civilized globe, through the most scrupulous attention to all the details in the process of production, we repeat here once more and state again: "That we are the sole manufacturers of Eucalyptus Essence who employ exclusively the leaves of the plant in gaining the article known as 'Sander & Sons' Eucalyptol' (Eucalypti Extract)." In consequence it is impossible to obtain "Eucalyptol proper" (the essence of the leaves) from any other source or the results the physician expects from any other manufacture.

The application of Eucalyptol proper is so positive and distinct in results that no doubt must be entertained as to the ultimate success. And if, nevertheless, disappointments be experienced, they rest with spurious articles supplied the physician in place of our product. This forms ample proof how imperative it is "That the physician in prescribing specifies our product and insists upon receiving it."

—Sander & Sons, Bendigo, Australia.

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Tumors of Renal Pelvis.

The case reported by W. C. Stevens, San Francisco (Journal A. M. A., June 5, 1920, is unique in that the tumor of the renal pelvis was apparently secondary to a papilloma of the bladder; at any rate, no tumor symptoms of renal involvement occurred for the more than one and a half years after the appearance and destruction of the bladder papilloma. The patient was a man, aged 70. In 1913, he noticed blood in the urine, and was troubled with frequent urination. Cystoscopy at this time revealed a pedunculated papilloma to the left of the left ureteral orifice. The symptoms disappeared following removal of the tumor with snare and cautery. Nineteen months later, January, 1915, he was in the hospital for two weeks because of severe pain in the right kidney region. His urine contained a trace of albumin, many hyaline, granular and cellular casts and some pus, but no blood cells at the time. Catheterization of the ureters revealed a few pus cells in the urine of the right kidney. The symptoms disappeared following rest in bed. Three years later, April, 1918, he entered the hospital because of blood in the urine. Examination of the urine at this time disclosed many blood cells, a trace of albumin and a few pus cells, but no casts. Cystoscopy revealed an inflamed bladder mucosa and somewhat bloody fluid escaping from the right ureteral orifice. Comparative functional kidney tests were negative. The urine was free from blood at the end of a week, and the patient left the hospital. Six months later he re-entered. Cystoscopy again revealed bloody fluid escaping from the right ureteral orifice. The bladder mucosa was normal. Functional kidney tests gave diminished values on the right side. The wax-tipped catheter showed no evidence of calculi. Pyelography demonstrated a right kidney pelvis somewhat elongated laterally and the ureter entering the pelvis at a right angle. A diagnosis of tumor of the kidney was made, and operation was advised and accepted. A large papilloma the size of a walnut was found when the pelvis was opened. No evidence of ureteral involvement was present.

Surgical Treatment of Typhoid Carriers—H. J. Nichols, J. S. Simmons and C. O. Stimmel (New Orl. Med. and Surg. Jour., October, 1919) summarize their observations as follows: 1. So-called urinary typhoid carriers are really kidney carriers and can be cured by nephrectomy. An additional argument for operation is present if the infected kidney is functionless. One such case is recorded. 2. Intestinal carriers are really bile-passage carriers of two kinds: (a) In which the gall-bladder alone is infected; these can be cured by cholecystectomy; four such cases are recorded. (b) The gall-bladder and bile passages are both infected. In these cases cholecystectomy does not cure the carrier and the condition is incurable at present. Two such cases are recorded. 3. The surgical treatment of typhoid carriers, while not perfect, is the best available.

The Change of Type of Disease.

Alteration of type of acute disease has recently come under discussion especially in connection with epidemics prevalent during the war, and serves as a subject for comment by Sir Humphrey Rolleston, London, England (Journal A. M. A., May 29, 1920). He seems to incline to the belief that bacteriology and changes in the resistance of the race, either comparatively permanent as the result of environment or transient from disease or other factors, explain alterations in the clinical type of disease. The phase is discussed. The resistance of individuals and races is obviously influenced by environment, such as overcrowding, overwork, bad food and alcoholism and thus both the incidence and the severity of the disease—conditions which must be distinguished from each other—become increased. The disappearance of typhus from Glasgow and other towns was naturally ascribed to but this disease simultaneously subsided in the West Highlands and Ireland, where no such sanitary alterations occurred, hence the possibility that the virulence of the infecting organism became attenuated.

"The fruit of a liberal education is not learning, but the capacity and desire to learn; not knowledge, but power."—Charles W. Eliot.

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PAIN

though primarily a symptom, will, if allowed to continue, soon depress or disturb every function of the body.

The prompt relief of pain, therefore, is always imperative, and to accomplish this

PHENALGIN

has no superior. Pain, no matter how severe or where located, is quickly controlled — and with none of the drawbacks of the opiates or the other narcotic drugs.

The every day experience of thousands of physicians has shown conclusively that no other anodyne is so satisfactory in its effect, and at the same time so free from disagreeable or harmful action.

The use of Phenalgin means the relief of pain — promptly, safely and satisfactorily — without upsetting the stomach, suppressing the secretions, or creating a habit. *No special blank or records required for its use.*

Well has it been termed by those who use it in preference to any other analgesic — "the logical supplanter of opium."

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The constant daily use in the home of a Reliable Disinfectant will prevent the spread of disease germs, and leave a clean, healthy atmosphere.

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Platt's Chlorides, ***The Odorless Disinfectant.***

Sold everywhere in Two Sizes.

Is absolutely Odorless, yet strong and effective. Has won the endorsement of the medical profession for over forty years.

Write for sample and booklet to the manufacturers,

HENRY B. PLATT CO.,

51 Cliff Street, New York

In Writing Advertisers Mention The Charlotte Medical Journal.

That old precept "An ounce of prevention is worth a pound of cure" may be applied with particular force to typhoid fever. It is the principle that justifies all sanitary and hygienic measures. It is also the principal that dictated the adoption of antityphoid vaccination in the army, with such brilliant results.

At this particular season of the year, when a large number of people are on vacation, there is always an increase in the number of cases of typhoid. The lake-side cottage or resort often lacks the sanitary arrangements which guard our health at home. The fishing camp or house-boat may be located on a polluted stream. The well at the old farm homestead is not above suspicion. The milk at the station restaurant may have been shipped in a can that was washed with typhoid water. The sandwiches and other food may have been prepared by a typhoid carrier—another Typhoid Mary. These are only a few of the risks a vacationists must take; in many ways the hazard is greater than that of the army camp.

In view of this very real situation it would seem that physicians could give their clientele no truer service than to urge them to secure the protection afforded by vaccination. Many of them are already so well informed on its efficacy that little more will be necessary than to suggest the advisability of being immunized before leaving home. Further information may be had by writing to Eli Lilly & Company asking for the monograph on typhoid.

ANODYNE ACTION WITHOUT DANGEROUS DEPRESSION.

Efforts to lessen the use of opium and its derivatives must commend themselves to all who are interested in human welfare. It is difficult, however, for civilized people to endure pain for long periods of time. A desire for a remedy that will successfully counteract pains is satisfied by the administration of Phenalgin. It appears to possess unusual value in relieving the aches and pains incident to influenza, rheumatism, lumbago, gout, menstrual disorders, and various other states that distress human beings, lessen their energy and deplete their vitality.

The anodyne action is secured with-

out fear of any secondary results harmful in nature or tending to bring about an appetite leading to the drug habit. It is safe and effective and lessens the reason for the use of opiates or other habit inducing anodyne. As a pain reliever, it may be depended upon because of its promptness, certainty and efficacy.

CASCARA IN CONSTIPATION.

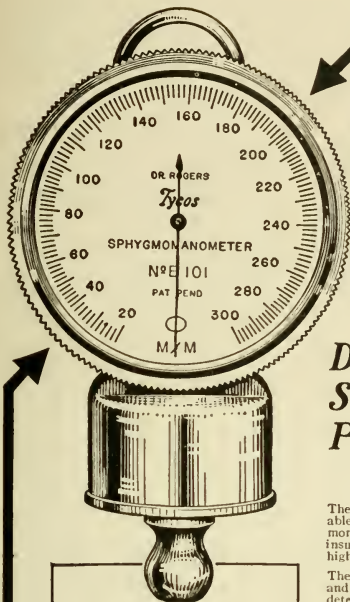
Cascara sagrada is unique. There is a distinct advantage in using it in the treatment of chronic constipation. For example, it stimulates the muscular structure of the intestine, thus promoting normal peristalsis. It activates the intestinal follicles, thus augmenting glandular secretion. Moreover, this stimulating effect is mild, not excessive. It approximates the work of nature and is therefore not harmful or retroactive.

To state the case in another way, cascara unloads the bowel in a normal manner and not by exciting violent and painful peristaltic movements and tenesmus, which not infrequently attend the use of the conventional purgative.

No other drug replaces cascara sagrada, which alone can be given for long periods without detrimental effect. In fact, success in its use depends upon its continued administration, in gradually ascending doses, until a natural daily action has become the fixed habit.

The original bitter fluid extract, introduced by Parke, Davis & Co. in 1877, is the preferred preparation in most cases, because of its well-known bitter-tonic effect. It is given in doses of 5 to 30 drops, according to the condition to be met, and this dose may be continued for several weeks in chronic cases. In more obstinate cases the initial dose should be increased gradually until the desired result is attained. At this point a progressive tapering-off system of dosage is adopted, rather than an abrupt cessation of the treatment.

For patients who cannot or will not take the bitter medicine, Cascara Evacuant is recommended. This is a palatable extract from which the bitter principle of the drug has been removed. It is well to remember, however, that the bitter fluid extract can be taken in gelatin capsules which are supplied to the patient with a medicine dropper. The prescribed dose is dropped into the



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\$2.50

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Genuine Dr. Rogers'
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Nine Months Then It's Yours

Dr. Rogers' Genuine Self-Verifying Blood Pressure Instrument

Standard of the World

There is only one standard of the world—reliable—dependable—accurate—and that is TYCOS—Dr. Rogers' Sphygmomanometer—which has been adopted and is used by all insurance companies, the United States Government and high medical authorities.

The TYCOS registers both systolic and diastolic pressures, and is the modern scientific diagnostic aid in accurately determining blood pressure.

Easy Rental Purchase Plan

By our easy rental purchase plan, after a first payment of only \$2.50, we will rent this TYCOS to you for nine months at \$2.50 a month, and at the end of this time it is your absolute property. You pay only the regular cash price—no interest or other additional payments to make—and you have

Nine Full Months to Pay

This is merely dignified business credit—no red tape—no formalities or embarrassing questions. You take no risk whatever, as we guarantee this to be the Genuine Dr. Rogers' 1920 Model TYCOS, which is fully warranted by the manufacturer.

Leather Case and Booklet Included Free

With every TYCOS is included FREE a genuine Morocco leather case. You can put your TYCOS in this case and carry the entire instrument in your pocket. Besides the case, we give you FREE a 44-page booklet which explains accurately, thoroughly and plainly just how and why the Sphygmomanometer is essential to the intelligent practice of medicine.

10-Days' Free Trial

Merely enclose \$2.50—your first month's rent—and we will ship the TYCOS at once. Try it thoroughly for 10 days. Give it every test you can. If you are willing to part with it, send it back at our expense and get your money. If pleased, then pay only \$2.50 a month for nine months. Send for your TYCOS today. Let it prove its usefulness to you.

Cash Price—\$25.00

The cash price of Dr. Rogers' TYCOS everywhere is \$25.00. But we will send it to you upon receipt of only \$2.50 and allow you ten days' free trial. Then if you wish to keep it, simply pay the balance, \$22.50, in nine small monthly payments of \$2.50 and the instrument is yours. You cannot buy it for less anywhere else. You cannot buy it on such easy terms except by the Aloe Easy Rental Purchase Plan.

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capsule, which is then closed and swallowed with no suggestion of its contents.

GYNECOLOGICAL SUGGESTIONS.

Beginning with this issue, starts a series of unique announcements in the form of the "Gynecological Suggestions." These suggestions appear in the advertising section of this journal and present what appears to be a page from a book of "Gynecological Suggestions."

Each suggestion is a valuable hint within itself, outside of the reference to the therapeutic administration of H. V. C.

Each month a new page will be turned and a new suggestion presented to our readers. The hints are worth while; see what they convey.

The Stuff That Counts.

The test of a man is the fight he makes,

The grit that he daily shows;

The way he stands on his feet and takes

Fate's numerous bumps and blows.

A coward can smile when there's naught
to fear,

When nothing his progress bars,

But it takes a man to stand up and cheer

While some other fellow stars.

It isn't the victory after all

But the fight that a brother makes;

The man, who, driven against the wall,

Still stands erect and takes

The blows of fate with his head held
high,

Bleeding, and bruised and pale,

Is the man who'll win in the by and by.

For he isn't afraid to fail.

It's the bumps you get, and the jolts you
get,

And the shocks that your courage
stands,

The hours of sorrow and vain regret,

The prize that escapes your hands,

That test your mettle and prove your
worth;

It isn't the blows you deal,

But the blows you take on the good old
earth

That shows if your stuff is real.

—The Three Partners.

Armour and Company have added 5-grain tablets of Corpus Luteum, Ovarian Substance, Anterior Pituitary Substance to their list. These tablets are packed in bottles of 50 and are labelled "5-grain." Each tablet contains 5

grains of the desiccated glandular substance, each grain of which represents a quantity of fresh tissue. Physicians desiring to use the glandular substances in tablet form may now obtain the Armour products in 5-grain tablets, as well as the 2-grain.

Local Anesthesia in Thyroid Operations—J. L. DeCourcy (Am. Jour. of Surgery, October, 1919) presents the following conclusions: 1. I advise early operation whenever possible. In skilled hands there is no more danger in removing a simple adenomatous or benign (not exophthalmic) goiter than there is in interval appendectomy; and benign goiter should be considered as potentially dangerous as a simple appendicitis or a hernia. 2. Preliminary observation and treatment in all cases of exophthalmic goiter with intensive study of the heart, kidneys and blood, are important. 3. If case does not respond to internal medication and rest, arterial ligation should be performed. 4. As a general rule I do not perform thyroidectomy when the pulse after a moderate amount of exertion exceeds 120 per minute. 5. I believe that a greater risk can be taken when local anesthesia is used than is possible under general narcosis, and that arterial ligation will be less often indicated. 6. Removal of both lobes and isthmus gives the best results in exophthalmic goiter and causes less reaction following operation. 7. Thyroidectomies can be done painlessly and thoroughly under local infiltration.

Nerve Blocking for Nasal Surgery.

A brief description of nerve blocking by procain, as used in twenty-nine nasal operations, with complete anesthesia in all except two cases is given by Robert G. Reaves, Greensboro, N. C. (Journal A. M. A., May 29, 1920.)

"The world generally gives its admiration not to the man who does what nobody else ever attempts to do, but to the man who does best what the multitudes do well."—Macaulay.

Being ignorant is not so much a shame as being unwilling to learn.—Benjamin Franklin.

I have noticed that folks are generally about as happy as they have made up their minds to be.—Abraham Lincoln.



NEURILLA FOR NERVE DISORDERS NEURILLA
 If Patient suffers from **THE BLUES** (Nerve Exhaustion),
 Nervous Insomnia, Nervous Headache, Irritability or
 General Nervousness, give four times a day one
 teaspoonful **NEURILLA** 
 In nervous fretfulness of teething Children
 give five to twenty drops.
DAD CHEMICAL COMPANY, NEW YORK and PARIS.



Aneemin *the sovereign Remedy for* **DROPSY** Samples to Physicians Only. **ANEDEMIN CHEMICAL CO., Chattanooga, Tenn.**

A Hand on Your Shoulder.

When a man ain't got a cent,
 And he's feeling kinda blue,
 And the clouds hang dark and heavy
 An 'wont let the sunshine through,
 It's a great thing, O my brethren,
 Fer a feller just to lay
 His hand upon your shoulder
 In a friendly sort o' way.

It makes a man feel curious,
 It makes the teardrops start,
 An' you sort o' feel a flutter
 In the region of the heart!
 You can look up and meet his eyes;
 You don't know what to say
 When his hand is on your shoulder
 In a friendly sort o' way.

Oh, the world's a curious compound,
 With its honey and its gall,
 With its cares and bitter crosses—
 But a good world after all.
 An' a good God must have made it—
 Leastways, that is what I say
 When a hand is on my shoulder
 In a friendly sort o' way.

—James Whitcomb Riley.

Chronic Appendicitis in Children with Report of Cases.

McGuire Newton—Sou. Med. Jour.

McGuire Newton cites four cases
 which emphasize the point that one may
 find an adherent appendix, with other

evidences of previous inflammation, in
 children in whom it is impossible to ob-
 tain a history of an acute attack of ap-
 pendicitis. This condition may be asso-
 ciated with continued digestive disturb-
 ances which may seriously interfere
 with the child's growth and develop-
 ment, and an X-ray examination of the
 gastrointestinal tract by a competent
 radiologist offers the best means of rec-
 ognizing this condition.

"Iodine In Its Safest and Most Effective Form"

This is the uniform verdict of medical men
 who have ever given

BURNHAM'S SOLUBLE IODINE

a comprehensive trial in serious cases of septic
 poisoning, pneumonia, influenza, empyema, or
 of the acute and chronic infections generally.

Free from gastric disturbance or other
 objectionable effects, this time-tried preparation
 owes its value to the fact that it presents iodine
 in a form that can be used in doses large
 enough and for sufficient periods to assure
 the results desired.

Hypodermic use is preferable in severe
 cases. 20 to 40 minims every three or four
 hours, full strength deep in the gluteal muscles,
 until general improvement is noted.

Write for interesting data on
 the effective dosage of iodine

Burnham Soluble Iodine Co.
 Auburndale, Mass.

*Minimum
in pain and
discomfort*

*Maximum
in
Efficiency*

"Arseno-Mer-Sodide"

ARSENO-MER-SODIDE is low in toxicity, ready for immediate administration.

A product that is giving real results.

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DENVER, COLO.

Speculative Science and Endocrinology.

The human body contains a certain number of bones and a certain number of muscles, but nobody knows how many glands. The function of the bones is fairly well understood; the purpose of the muscles is easily comprehended from their structure and action; but our knowledge of the function of all but a few of the glands is in the theory stage. If some one were to suggest that the function of the muscles is to control the will, there would be no lack of evidence to prove that the function of the will is to control the muscles; but when a speculative philosopher arises to remark that the interstitial cells of this or that tissue secrete a hormone whose function it is to govern the duration of life, thousands are ready to give him credence. It is this state of affairs which has called forth the following, which we quote from an editorial in a recent issue of the British Medical Journal:

"The speculative philosopher is always with us, and during the last few

years has found his chief medical field of activity in the ductless glands and their secretions. Here he has been extremely busy, with the result that the number of such 'glands' has grown almost equal to the number of different tissues in the body; while the number of internal secretions and hormones postulated has become no less enormous. Indeed, it may be said, not unfairly, that with many writers who deal with the subject the only proof of the existence of a hormone nowadays required is that it should seem to be demanded by theory."

There is danger that the great accomplishments in medicine of the last two decades have left the medical mind in too receptive a mood. Some physicians, we fear, are accepting theories on plausibility rather than on evidence. Such a condition is dangerous, because in such soil the pretender and quasiscientist which is good" should be the scientific thrive. "Prove all things; hold fast that attitude.—Jour. A. M. A., June 5, 1920.

Dioxogen

Why

is a supply of Dioxogen found in the emergency outfits or surgical kits of so many physicians?

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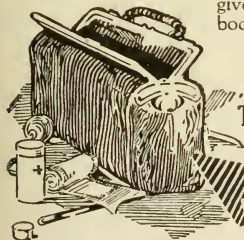
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The Charlotte Medical Journal

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No. 3

SOUTH AMERICAN SURGEONS.

Theodore Roosevelt, with characteristic courage and vigor, overcame all opposition and caused the Panama Canal to be built. The dream of nearly five centuries was realized. The whole world is forever Roosevelt's debtor. By the severance of the land connection between North and South America these two continents are now united as never before. The long, hazardous routes of travel of the olden time have been replaced by new ones, safe and speedy. The great war came so quickly after the completion of this epoch-marking achievement that it has not as yet touched Pan-American imagination.

Having returned recently from a trip to South America where, in company with Dr. Franklin H. Martin, I visited some of the important surgical clinics of Peru, Chile, Argentine, and Uruguay, where we became acquainted with and observed the methods of many surgeons, I take this early opportunity to pay merited homage to these men of science, learned in surgery. It is but just to say that in their hospitals and operating rooms they are the equal of any representative group from any country in the world. They have that intuitive clarity of thought and facile mastery of technique which we associate, and rightly, with the French and Italian schools. The surgeons of South America have recognized for a long time the necessity of frequent clinical trips to observe the work of foreign surgeons; of late years many of them have come to the United States; it has been always a pleasure to know them.

Their medical schools are splendid institutions with a seven-year course, and are the equal in equipment and methods of theoretic teaching of any in the world. In South America "Commencement Day" means just that, for after graduation the young surgeon begins a special course of surgical training. Instead of carving his way to knowledge and experience by the scalpel, he is tutored for a period of from eight to ten years along lines which we of the United States have accepted only recently under the general term of fellowships in graduate medicine and surgery.

The hospitals of South America are imposing, built for the tropics, and associated with the medical schools. The hospital records are the best I have ever seen; this is true of every hospital we visited, small or large.

The reception given us by our South American confreres was most cordial, and we came away with not only admiration for the South American surgeon as a surgeon, but also with a feeling of personal friendship for him that will last for life. Whatever may be the afterwar responsibility of the United States abroad, we can not question that our first duty is to develop a sound Pan-Americanism.

A Pan-Americanism of science, a unity of the spirit and ideals, will be more lasting than measures based on financial, commercial, or political considerations.

William F. Mayo

Original Communications

CHRONIC SURGICAL INFECTIONS OF THE ABDOMEN.

By Samuel Orr Black, A. B. M. D.

Formerly Member of the House Staff Jefferson Medical College Hospital, Philadelphia, Penn., House Surgeon St Mary's Hospital, Rochester, Minn., and Member of Medical Corps of United State Army.

From June, 1915, till July, 1918, with the exception of a very short time, I was either first or second assistant to no less than six of the world's greatest operating surgeons.

During that time it was my pleasure to have seen many hundred abdomens opened and closed, as well as hundreds of others surgical procedures, which when combined totalled several thousand cases.

From these there are many happy and quite a few sad recollections.

Happy, because the preoperative diagnosis was so frequently confirmed; because the mysteries of the abdomen were unfurled; because of the close association with the master minds of American surgery; because of the opportunity of witnessing their operative skill and acquiring some of their surgical judgment; and because disease was so frequently overcome and death defeated in many cases.

Sad at times we were, because death was not stayed in all, because of some dreadful post operative complication, because of the suffering seen in some dying patient, but saddest of all, because we were unable to stop post operative bleeding in two different cases in time to save their lives.

From the mistaken diagnoses made by ourselves and others, from the evidence of a previously performed poor operative technique, from the unfortunate complications and sequelae of operations done elsewhere, and from overlooked pathology, which persisted in causing trouble sufficient to eventually bring these patients to the men I was with, I have drawn the substance of this brief paper.

To err is human and to criticize is furthest from my purpose. From the mistakes of others as from our own we must profit.

Every case of supposedly chronic, interval or periodic appendicitis, call it

what one will, should not be immediately operated, because of the danger of error in diagnosis.

There are more mistakes made by the medical profession in this country each year, over what is supposed to be a case of chronic appendicitis, than there is over any other one surgical condition.

One not acquainted with the histories of patients of this type, coming to the large clinics of the country after having been previously treated and perhaps operated, would be surprised at the proportion who either have had their appendix out, or who have been advised to do so.

It is obviously impossible to cite in detail the actual findings in all the cases in mind because, first, they are too numerous and second, because, they were not my own.

From some, stones were removed, from the gall bladder, from one or the other of the kidneys, from one or the other of the ureters and in one instance from the urinary bladder.

Cholecystectomies were done many times, and nephrectomies in a few instances before the patients were cured.

On one occasion a tuberculous cecum was resected, and in another a carcinomatous cecum was excised, with an end to end anastomosis.

There were over a score of these patients with ulcers of the stomach or duodenum, which necessitated gastroenterostomies, with or without ulcer excision, plication or destruction by means of the actual cautery.

In others, pelvic conditions were found sufficient to explain all the patients previous symptoms.

In one case we did an Albee operation for Potts disease—to relieve the pain in the right lower abdomen—which had been erroneously interpreted as coming from a diseased appendix.

A subdural extra-medullary spinal cord tumor was enucleated, from a patient who had been urged, elsewhere, to be operated for appendicitis.

One case I well remember—a Canadian, who had repeated attacks of right lower abdominal pain, rather colicky in nature. Some months previously his appendix had been removed. The symptoms recurred shortly thereafter, and I assisted in the removal of a large functionless hydronephrotic kidney, due to

the kinking of the right ureter by an anomalous blood vessel.

In another case—a lad of twelve years, we found not a diseased appendix but a polycystic kidney—probably congenital in origin.

On two occasions abdominal explorations revealed horseshoe kidneys. Both of these had been told that they had appendicitis, before they left home.

Examination of one appendix, after its removal, showed its tip to be carcinomatous. This case was operated on two years ago and tho' I have not heard from the patient since she left the hospital, she should be well and alive today, because carcinoma of the appendix and of the cecum is the most favorable carcinoma to be found in all the gastrointestinal tract below the lip. So frequently has appendectomy been performed that even the laity speak of it as only an appendectomy, for only an appendix. Little do they know of the sad and unfortunate complications which all too frequently occur.

Pneumonia, peritonitis, fecal fistula, wound infection, post operative hernia; intestinal paresis, kinks leading to acute obstruction, terminating in death, unless appreciated early and relieved by operative interference—as well as pulmonary and fat embolism and other things, all constitute possibilities terrible in nature, sufficient to raise the plane of appendiceal surgery.

From an athletic type of man in his early thirties, we removed an appendix, which had given him trouble off and on for several years.

On the afternoon of the fifth day he was suddenly seized with a severe and agonizing pain in the right lower abdomen. His pulse rate had jumped to 140 and he was in a drenching sweat, when I saw him twenty minutes after the onset.

The dressings were removed and one inch to the right of the incision were found two small areas of crepitation. These spread rapidly in the course of the next hour or so, at which time multiple incisions were made down into the gaseous tissues. For forty-eight hours he was a desperately sick man, then threw an additional temperature rise of two degrees and the base of both lungs was found to be undergoing a process of consolidation. He lingered along for several more days, the left lung clearing and his general condition im-

proving until the ninth day when his temperature again went up a degree, and pus was obtained from the right pleura. A thoracotomy under local anaesthesia was done to drain the empyemic cavity and after many days he recovered.

Originally, his too, was only an appendix, but, oh! what it led to.

Perhaps the most important single principle to bear in mind when operating for supposed appendiceal pathology, acute or chronic, is the straight right rectus incision. It has saved good men many errors and failure to use it has caused many men more errors.

In children up till ten or twelve or even fifteen years, with acute appendicitis the McBurney incision is probably the one of choice.

In males or females beyond that age the straight incision is the one par excellence, because it "dispels the darkness and reveals the light of day."

Abdominal surgeons see many instances of multiple lesions in a single abdomen.

Gastric or duodenal ulcers, cholecystitis, with or without stones and a diseased appendix are not infrequently found in the same individual. Remove the appendix first, do the anastomosis second and excise the gall bladder last, all at a single sitting.

These three structures are the ones most frequently involved, when either one or the other is diseased. In many cases they run along in sequence, one to the other, like the chapters of a book. Never operate upon one of these without first examining the other two. The older the patient and the longer the history, the truer the statement.

In many patients with mixed upper and lower right abdominal symptoms, where accurate painstaking histories are taken, one can fairly accurately judge the sequence of involvement, and approximately determine the date of onset in each structure.

Bacteria in one organ, is a focus from which other organs and tissues are inoculated. So true is this that in patients beyond their late thirties or early forties, having a history of several years standing, it is almost the exception to open the abdomen and to find only a single viscus diseased.

Therefore the absolute necessity of a thorough exploration every time the abdomen is opened.

I remember one case in which the operator found a carcimoma of the cecum, after he had opened the abdomen primarily for the removal of gall stones. There had been absolutely no symptoms of an intestinal lesion.

Much has been written in recent years of the relation of a diseased tonsil or an abscessed tooth to arthritis, myositis, neuritis, sciatica and the like.

I would call attention to a too oft neglected focus, namely the gall bladder. More than once we have had cases with this organ as the primary focus. One was a woman with a history of gall bladder disease extending over many years. For some months she had suffered from myositis of the right Levator anguli scapulae, with no other apparent cause. Another woman had had several attacks of acute cholecystitis within a period of several years and she came in complaining of multiple arthritis. Absolutely no other focus could be found and her gall bladder was removed.

When proper inquiry is made organs and tissues other than tonsils and teeth will also be found to be playing a role in a certain percentage of cases of so called indefinite or obscure origin.

Spartanburg Hospital, Spartanburg, South Carolina.

Double Choked Discs—Operation, with Recovery of Vision. Henry L. Sloan, M. D., Charlotte, N. C.

Mrs. R. D. G.-----; Age, 19.

First seen on March 16, 1920.

C. C.—Failure of vision and headaches.

H. P. I.—About one month ago patient began to suffer with headaches, and vision began to fail, and had failed so much that she had to be led into office. There was also nausea and vomiting, worse in the A. M., and on change of position—not projectile.

When first seen one month after onset of P. I., patient was in a very anxious state of mind; she seemed to feel as if some calamity were imminent. At all times she was mentally alert and answered questions promptly. Complained much of headaches, which did not seem severe.

P. M. H.—For a few months before onset of P. I., patient said she suffered a great deal with rheumatism—which continued up to the time she came to our office.

F. H.—Of no importance.

Physical examination.

T. P. R.—Normal. General appearance good. Appetite good, but digestion poor.

Eye Findings—O. D. V. Count fingers two inches. O. S. V. Amaurotic; light perception absent. Both eyes prominent, but always thus. Pupils widely dilated and did not react to light. Media clear. Both discs were enormously swollen—showing about nine diopters of swelling with many hemorrhages, and with usual contortions of vessels in such condition.

O. D.—Ext. rectus showed paresis.

O. S.—Ext. rectus paralysis with convergent squint.

Nasal examination, and X-ray of sinuses negative. X-ray of teeth, urinalysis (repeated examinations) negative. Blood and spinal fluid Wassermans, negative. Leucocytosis—20,000. Spinal fluid cell count 3, and under pressure,—with monometer, 26. (Normal anywhere up to 10.) Blood pressure 128-80. Neurological Exam.—Has ataxia of both hands. Knee jerks absent. No clonus.

Treatment: Although rhinologic examination was negative, we opened ethmoids and sphenoids. Negative pathological findings. However, the next day patient remarked that she was no longer troubled with rheumatism, and was free of it during her stay in hospital.

Vision did not improve and subjective symptoms of headache and nausea persisted. Two days later a temporal decompression was done by Dr. Brenizer. Soon all symptoms were relieved and vision began to improve and improved steadily until patient was dismissed from the hospital.

An examination of eyes April 6 showed: O. D. V.—20/100. O. S. V.—20/100.

Practically all retinal hemorrhages had been absorbed and there were only three diopters of swelling of both discs. Both external recti showed much improvement of function. Patient went home feeling fine, with useful vision and with a good chance of much better vision as time passes.

This is a case, probably of brain tumor; which Cushing tells us will be found much oftener if we only look for

it. With refined methods of diagnosis they were found to be much more frequent, than old statistics indicated in the records of Johns Hopkins Hospital.

Other causes of choked discs are nephritis, syphilis, basilar meningitis, suppurative sinusitis, and echinococcus cyst of brain, disseminated sclerosis, etc. These could be practically all ruled out in this case. Choked disc in brain tumor is present in about 80 per cent of cases.

Given a case with symptoms of headache, nausea and vomiting, we should make a careful examination of the visional fields. Dyschromatopsia (interlacing and inversion of the color fields) is a much earlier sign of brain tumor than choked disc. This sign can be easily demonstrated. In its most typical form, the blue field is interlaced and may become completely inverted with the red. There may be blue scotoma or a total achromatopsia for this color alone. And many other varieties conforming somewhat the type mentioned above. We have been taught that such perimetric findings are peculiar to functional and hysterical states. That such color field changes are due to increased intracranial pressure has been shown by rapid restoration of normal color values in the fields of vision after relief of the pressure. So I would urge use of these examinations under such circumstances.

Of course, in the case here reported the possibility of any helps from tests dependent on good vision was precluded. But they could have been done earlier.

Given a desperate case of the character here reported, I would urge cranial decompression as an emergency measure to conserve vision. Then look for the cause later. This operation is not necessarily heroic or dangerous.

In conclusion, one purpose I have reporting this case is to emphasize the importance of ophthalmology as an aid to general medicine. The eye is an outgrowth from the primary forebrain, and is very closely related to many pathological brain changes. We are very fortunate in having many of our medical men quite alive to this fact.

Much valuable information can be had in the diagnosis or intercranial lesions in the earlier stages by use of ophthalmological examination, and we

feel that it should be made use of more often in such conditions.

Note: Patient was seen on June 8th, 1920.

Vision: O. D. V.—20/40 minus 1. O. S. V.—20/70 plus 1.

Both discs had lost all their swelling. There was slight bilateral papillary palor. Both external recti had regained normal function. In fact, patient felt quite well.

Aug. 16, 1920. A message came from Mrs. G. saying that "she is well and feeling fine," and that she hoped soon to become a mother.

PRE NATAL CARE.

Ivan Procter, M. D.

Obstetrician to Mary Elizabeth Hospital,
Raleigh, N. C.

It is very pleasing to me to watch the improvements that are so rapidly taking place in Obstetrics: improvements in the form of education of the profession, hospital care and education of the public. The last is by all means not the least. It is a difficult task, but an important one, to teach the child-bearing woman to carry out her physician's instructions in an intelligent manner. It requires time and thought on the part of the physician, but he owes this to the woman who trusts her life and the life of her babe to be in his care. We must help the public to forget and bury the Grandma and home-made remedies that have so often caused the downfall of patients, who might otherwise have been carried safely to motherhood.

The physician who takes the responsibility of caring for a woman during pregnancy and labor must be like the surgeon who takes the responsibility of opening the abdomen for a simple appendix. He must be capable of meeting any emergency, whether it be to remove the gall bladder, resect the intestine or a pubiotomy and high forceps. It is the Accoucheur's duty to keep abreast with the times and make the same advancement in the care of pregnant, parturient and puerperal patients that our colleagues are making in other forms of surgery. We must have the same rigid technique, absolute asepsis and assistants that the surgeon requires. The obstetrical case is at all times more important than the average surgical case and usually requires more skill.

It is not necessary to live in a large city with the advantages of a modern hospital to render the majority of pregnant patients the best treatment. But it is necessary for physicians attending this class of patients to visit obstetric clinics, to read obstetric literature, and not to think pregnancy an altogether normal condition. On the contrary think of it as "a disease of nine months duration," and such a thought is a reminder that the patient needs constant care and attention.

When a pregnant patient has a complaint it doesn't mean that she needs medicine, but it means that she needs an examination to determine the cause of her complaint. The every ready prescription writer often uses his prescription to conceal carelessness, indifference and at times ignorance. The use of drugs should be in direct ratio to the accuracy and thoroughness of the examination. If a patient complains of a certain symptom and upon thorough (mark me I say thorough) examination nothing abnormal can be found, it is better to explain this fact to the patient and not prescribe, than it is to give her a placebo. The majority of patients will be better satisfied (and more willing to pay you) to have an examination and learn that there is nothing pathological, than to have the best therapist prescribe for them. If the symptom is an ache or pain look for a focus of infection in the teeth, tonsils, tubes, gums, nose, or pelvis of the kidney, either of which may be liberating toxins, pus, or bacteria that produce the symptoms. In case the complaint is persistent headache or pain in the upper abdomen, spend five minutes taking the blood pressure, then examine the urine, and if need be repeat these tests for several days. Make sure the symptoms complained of are not premonitory signs of eclampsia.

It is my practice, when a patient engages me as her obstetrician, to give her a thorough examination in the beginning. There is no time so convenient as the first visit. This examination includes a detailed study of the nose, teeth, tonsils, gums, thyroid, heart, lungs, abdomen, generative organs and most important, measurements of the bony pelvis. No Accoucheur should allow a primipara or a multipara with a history of difficult labor

come to them without having accurately measured her pelvis. Later (about the eighth month), I make a second examination to determine the position of the child and to see that nothing abnormal has developed.

I give each patient the following written instructions at her first visit:—

1. Avoid over eating. Never eat between meals. Meat only once a day.

2. Reduce exercise below normal and avoid violent forms.

3. Do not lift anything heavy, especially children.

4. Be careful not to catch cold. Wear enough clothing to protect the body and do not allow the feet to get wet or cold.

5. Be extra careful at what would be menstrual periods.

6. Report at once any persistent headache, spots before the eyes or pain in the abdomen.

7. Send a three ounce bottle of urine the first of each month until the ninth, then the first of each week until confinement.

8. Report for blood pressure examination the fifteenth of each month until the eighth, then the first of each week until confinement.

After issuing these instructions I see that they are carried out. If the patient is for any reason unable to visit my office at the proper time, or if in the latter months of pregnancy it is too embarrassing, I make it a point to see her at home. Some patients co-operate better than others; we must look after those who are negligent.

The pregnant patient often reminds me of the patient with symptoms of appendicitis. Many of them will get well without much care or attention, but the risk is too great. To save the few cases of appendicitis we must have them all operated as soon as the diagnosis can be made. Such is the case with the pregnant patient. We must watch them all carefully to save the few that will not get along without it. Don't be like the practitioner who made this remark to me some time ago: "When a woman engages me to look after her during confinement, I give her a casual examination, make a urinalysis and tell her to call me when she falls into labor. I make no record of the case but leave it to the patient." Such practice in my mind is grossly negli-

gent. The Accoucher should not have the thought: "How little can I do and get by" but should have the thought: "What more can I do to prevent any possible complications?"

In conclusion, we must raise the standard of obstetrics by educating the public and encouraging better preparation on the part of the physician.

Give written instructions to each patient and see that they are carried out.

Remember the pregnant patient requires constant care and attention on the part of her physician.

Repeated examinations are necessary and are often preferable to drugs.

Personal hygiene should be foremost in Pre-Natal Care.

VACCINES IN BLOOD INFECTIONS.

By G. H. Sherman, M. D., Detroit, Mich.

There is a prevailing impression among many physicians that a blood examination will reveal the germs that are responsible for almost any infectious disease. That blood infections are more common than was at one time supposed, is true. We know that an infection may be carried from an infected tooth-root, tonsil or sinus to a joint, to the heart, or appendix, and necessarily the infecting organism must be conveyed from the original focus to the remote organ by means of the blood stream, but in this class of cases the infecting organism is seldom found. Evidently the germs are conveyed from the original focus of infection to the secondary lesion in such small numbers that it would be merely a remote chance to find them in a sample of blood. It must be remembered that it would not require a large number of germs to start a focus of infection if they should become lodged in susceptible tissues. Cultivated on artificial culture media, a single germ will multiply to several million within twenty-four hours. That germs will not grow as rapidly in an infection is quite probable, but this shows the possibilities from a single organism in so short a time. So, when we attempt to find the infecting organism by examining the blood in cases of sub-acute or chronic localized infections, we should realize that it is seldom found in such cases. In extensive acute infections like pneumonia, puerperal fever, scarlet fever, typhoid, erysipelas, extensive streptococcus wound infections,

acute tonsillitis and lymphangitis, sepsis, etc., blood infections are common.

Of the various infecting organisms found responsible for blood invasions the streptococcus, staphylococcus, pneumococcus, and gonococcus are the most common. Among the less common organisms found in the blood the colon bacillus, influenza bacillus, typhoid bacillus, meningococcus, and bacillus pyocyaneus may be mentioned.

In acute conditions where a blood infection is suspected a culture may be obtained by withdrawing 10 c. c. of blood from a vein with a sterile hypodermic syringe after having thoroughly sterilized the skin over the vein, and then planting the blood under aseptic precautions into tubes of peptone beef tea, with about one part of blood to five of peptone broth. A few drops of blood should also be planted on ascitic agar slants. The broth tubes and agar slants should then be incubated and examined for growth by the usual methods.

In the less acute or chronic cases organisms may be found in the blood by a method devised by Rosenow (Journal A. M. A., Sept. 12, 1914), described as follows:

"In order to furnish bacteria from the blood and other sources a gradient of oxygen pressure, the following method for making blood-cultures has been used with good results: From 15 to 30 c. c. of blood are withdrawn from the vein at the bend of the elbow in the usual way and decalcified, by adding to it a solution of 2 per cent sodium citrate in sodium chlorid solution in the proportion of 5 c. c. of blood per 1 c. c. of solution. Control tests have shown that the bacteria contained in the blood from a wide range of conditions live in this solution for at least 72 hours. The citrate solution is kept in a tube of suitable size closed by an aluminum screw-top containing a rubber disk and sealed with paraffin. This may be used at the bedside and then sent to the laboratory for culture in case, for some reason, it is not convenient to make the complete culture at the bedside. In my work a portion of the citrated blood has been at once planted to sterile distilled water contained in bottles which serve as centrifuge tubes, there being at least 10 parts of water to 1 part of citrated blood. This is centrifuged at once and the supernatant hemoglobin containing

water is poured off or the sediment removed with a sterile pipet, and planted. The sterile water serves as a means of getting rid of the hemoglobin and the serum. Control tests with the serum after the corpuscles have separated by gravity show that in the aerobic cultures the inhibiting action of the hemoglobin is more marked than that of the serum; in fact, the serum is a desirable constituent in streptococcal cultures. Hence in suspected streptococcal infections the serum and the sediment of the dissolved corpuscles may be planted separately. In some instances the hemoglobin has been converted into methemoglobin by passing carbon monoxid (illuminating gas) through the decalcified blood by means of a sterile pipet containing a long sterile cotton plug."

The presence and maintenance of an infecting organism in the blood for any considerable length of time is conclusive evidence that the immunity to such an organism is low, and the course passed by such a blood infection would indicate that the infecting organism will maintain itself in the blood until the infection localizes in some tissue with a resulting inflamed area. Allen ("Vaccine Therapy and Opsonic Therapy," Fourth Edition, p. 267) describes this condition thus: "Antibodies are not formed in the general circulation, but in the blood-forming organs, muscles, and subcutaneous tissues. It therefore follows that it is only when circulating bacteria have been trapped in such localities that any stimulus is given to the formation of anti-bodies."

This condition is well illustrated in pneumonia where the pneumococcus circulates freely in the blood at the time of the initial chill and disappears from the blood as lung consolidation develops. In cases of pyemia staphylococci are found in great numbers in the clear up if the patient survives the infection. Puerperal sepsis is particularly dangerous when no localized inflammation develops. Certain types of streptococci will maintain themselves for months in the blood and will only disappear from it after producing rheumatic joint, heart or other localized involvements. This indicates that adequate antibody production requires tissue involvement in the infective process.

Germ destruction in the blood takes place either by lysis or phagocytosis.

Lysis demands the presence of ferments in the blood that dissolve the germs. Sir A. E. Wright demonstrated that phagocytosis is only possible when the leucocytes are suspended in a blood serum that has a sensitizing influence on the germs and that this sensitizing influence depends on some soluble substance present in the serum which combines with or attaches itself to the germ, and that in all probability the major portion of the germs present in the blood stream are destroyed by the leucocytes after they have become sensitized. Since adequate germ destruction in the blood does not take place until the infection localizes, it is quite clear that these sensitizing substances are mainly produced as a result of tissue involvement. The germ while present and multiplying in the blood evidently possesses a certain virulence which would involve some danger to the leucocytes if they were to ingest them and as a result the leucocyte retreats instead of making an attack. In other words, the germ in its attempt to live must digest and assimilate food. Digestion depends on the presence of ferments. The germ evidently surrounds itself with an extracellular substance which possesses a digestive influence on substances with which it comes in contact, and the leucocyte, not being able to contend with an organism which possesses such destructive properties, refuse to ingest it. When the infection becomes localized the germs still possess their destructive properties, but the germs in this instance become anchored to the locality and their influence on the tissue cells becomes more continuous. Some of the cells at the center of infection may become destroyed, resulting in pus formation, but the constant influence of the localized infection is liable in time to develop the defensive mechanism with the production of specific ferments or antibodies. These ferments gain entrance to the blood stream and combine with or neutralize the destructive substances which surround the germ. When a germ is thus influenced its digestive apparatus is crippled and is then said to be sensitized. The leucocyte can then ingest it without danger to itself and in the process of digesting or dissolving the germ the leucocyte secretes a ferment which will also have a destructive influ-

ence on other germs of the same kind still circulating in the blood.

From this it is clear that, in cases of blood infections where the infecting organisms circulate freely in the blood, tissue sensitization does not take place for adequate antibody formation until the infection localizes, causing tissue involvement. This would account for the striking results that are obtained from the hypodermic use of bacterial vaccines in cases of extensive blood infections when applied early. Since tissue involvement appears necessary to produce antibodies in these blood infections, we accomplish this very thing by giving a vaccine. The killed organisms are injected under the skin where tissues become actively engaged in destroying the killed germs that were injected and during this killed germ destroying process from this localized tissue activities, antibodies are formed and these antibodies will then combine with the infecting organisms circulating in the blood, destroying their virulence and making them susceptible to phagocytic action insuring their ultimate destruction.

From this conception of the immunizing influence of bacterial vaccines it is readily seen that they should be employed in diseases like pneumonia, influenza, sepsis, pyemia, scarlet fever, typhoid, etc., it behooves every physician to always be prepared to give them at the first visit and not to postpone this treatment until the second call, when the opportune time to obtain the best results is often lost.

SALT WATER AND THE EARS.

By Dr. Alfred Kahn
New York

A sojourn at the seashore. Have you noticed how many people have cotton stuffed in their ears? Have you seen the artificial ear-drums which they insert in the canals of their ears, with the idea of protecting them from the sea water?

Numerous people, each year, are taken down with all kinds of inflammation of the ears, from pimples and furuncles in the external auditory canal to involvement of the mastoid bone; in many instances necessitating a mastoid operation.

Cotton or artificial ear-drums in the outer auditory canals are almost en-

tirely useless as a protective measure from salt water. People imagine that by occluding the ear canals, that they keep water out of the ears. In any case, they have an imaginary but unjustifiable security, when their ears are plugged, that the plugging prevents irritation of the small bones and inner lining of the organ of hearing. Ear-drums and cotton may possibly keep water out of the outer ear canals, but one cannot be sure that it even does this. In many instances, the plugging up of the ears by artificial ear-drums is the source of inflammatory swelling or furuncles in the outer canal, and these small abscess formations are not entirely without danger. In a normal person, where there is not a perforation of the ear-drum, water entering the external auditory canal, cannot pass into the finer mechanism of the middle and internal ear, because of this protective measure on the part of nature, the tympanic membrane.

The great danger comes from the fact, and this is doubtless given little thought or weight by the profession as a class, that the salt water enters the ear from the inside through the nose and mouth. It passes up through the nose or mouth and enters the middle ear through the eustachian tube. Salt water once entering the tympanic cavity is in a favorable position to communicate with the finer mechanism of the inner ear, the mastoid bone, or even indirectly with the brain coverings and larger sinuses in this region; often resulting in severe disease, necessitating the most difficult of operations, days of convalescence and in some instances resulting even in death. Closely allied to these conditions that may arise in sea-bathing, as a matter of cause and effect, are several preventable conditions, such as obstructions in the throat and nasal passages. Among the obstructions that may be mentioned are large and infected tonsils and adenoids, obstructions and disease, often of an infectious character, in the nasal passages. Catarrhal conditions of the upper air passages are in many instances a direct cause. The mechanism of these involvements is usually about as follows—A person will dive deep under the surface, or will duck their head suddenly under water, or will be surprised often by some friend, who in a spirit of fun will shove the innocent victim's head suddenly under the water; often the

victim will even make a complete somersault or turnover under water. All this time, the nose passages are open to the inflow and pressure of the water, and the deeper the persons dives or the further under the water, the greater the pressure. On account of this pressure, the water cannot directly return. Unconsciously a human being every few moments swallows, and when under the water during this act of swallowing the eustachian tubes are thrown open; the increased pressure of water and infected matter from the nose, throat and mouth is then carried into the ear through this tube, leading from the throat to the middle ear. Now, when the diver, if you will, reaches the surface, he first draws in a long breath, which has the further effect of saturating and spreading the infectious material and concentrated irritating salt solutions somewhat deeper toward the lower air passages (pharynx and larynx). The victim then usually violently tries to blow and clear out his nose and throat. This results in creating a back pressure still further again toward an open inflated eustachian tube, and the dirty catarrhal infected salt water solution is again driven back into the middle ear, giving it additional ground for infection. Now, what does this victim usually do? It is ten o'clock in the morning and he has the whole day before him. He now comes splashing out of the water and stands in the wind in a wet bathing suit and allows his body to become blue and chilly. He is now almost ripe for the surgeon. He stands or sits around on the beach, anywhere from fifteen minutes to an hour, after which he again enters the water, and in sequence repeats the previous performance. He may do this as often as half a dozen times or more. Now, all this time, while he is going through these various performance, he has both of his ears plugged up with cotton or with artificial ear-drums, when as a matter of fact, if he had taken the preventative precaution of having gone to his physician and been advised as to the condition of his nose and throat and ears, and assured that he was free from all infections and obstructions, that he did not have a scabby, catarrhal or purulent nasal chamber before he entered the water, a state of affairs easily diagnosed and treated, and if he had only used a little common sense in diving

and otherwise protecting his body from chill, he would not undergo the extreme chance of getting ear trouble. Plugging the external auditory canal, as a preventative measure against salt water ear, is absolutely useless.

50 East 42nd Street.

HOW VITAL RESERVE FORCES ARE GENERATED.

By Dr. Axel Emil Gibson
Los Angeles, Calif.

We have two classes of vital reserve forces at our disposal—constitutional, or those which are inherited from the parent and transmitted to the child, and the acquired ones which are generated by the individual himself in the course of his daily modes and methods of living. The former represent a fixed measure of constitutional possibilities—a physiologically charged dynamo, so to speak, in which is stored up a measured supply of available energy ready to be distributed, under the strain of functional needs, over a period of normal, law-governed existence. But just as an engine, if its strain is too severe, or its course too steep or too circuitous, may exhaust its supply before it reaches its scheduled terminus—so the individual, in his efforts to overcome the obstructions which wrong living place in his career, may have to draw upon his reserve forces to the extent of their complete exhaustion before he reaches the normal end of his life's journey, in the tragic gloom of premature senility and constitutional breakdown.

On the other hand, it is quite within our reach to regenerate and increase our reserve forces by a careful husbandry of the powers which alone can come to us through loyalty to the laws and duties of life.

For every act in our routine existence either intensifies or diminishes our powers; either raises or lowers our place in the scale of being. Through our self-conscious acting we constantly employ universal forces by which we energize the nerves and muscles of our organism; and to the extent our motives—which stand as individual patterns of creative life—are selfish or unselfish, we generate or destroy our individual powers of health, strength and survival value. Hence, a clean, altruistic, self-respecting life constitutes an unceasing source of physical power and manhood—cap-

able of regenerating and reconstructing forces that shall enable us to weather with ease the strains of a hundred years and beyond.

The force which holds all other forces in obeysance is the force of will. Without a self-centered, morally pure will, enduring health is impossible. The power of will manifests under the rule of two categories—the universal and the individual, the subjective and the objective. The former acts involuntarily, without our direct knowledge—as in the acts of digestion, respiration, perspiration, palpitation, seeing, hearing, sometimes even talking; while the latter shows its presence in the determinate efforts of the self-conscious individual in his relation to moral motives. Yet, though in most cases unconscious to the individual himself, his subconscious will—the will of his functional or instinctual life—may be influenced by his personal, self-conscious will, and the purity of his motives and firmness of purpose have the power to send an impulse of corresponding tone and vigor into every phase of his cellular activity to be manifested in health, strength and joy. On the other hand, if the personal will is feeble, gauged by doubtful motives and vacillating in purpose, the effect on the system will naturally be the very opposite, resulting in the various physiological disturbances and chronic infirmities which make individual life void of public value and usefulness.

It is thus in the cultivation of the strong will, pure motive and tenacity of purpose, coupled with a knowledge and practice of a sane system of eating and breathing, that the individual can generate and preserve the most rejuvenating and enduring type of vital reserve forces.

It is just as necessary to employ a competent health officer and to pay him adequately for his services as it is to employ a competent Chief of Police or a competent Fire Chief. The compensation of our local health officers should be materially increased and the holders of the office expected to devote such time to their public duties as will adequately safeguard the public health.

SOUTH AMERICAN SURGEONS.

By Franklin H. Martin, M. D., F. A. C. S.

A Trip in Behalf of the American College of Surgeons by Dr. William J. Mayo, President, and Dr. Franklin H. Martin, Secretary-General. Jotings of the Secretary-General—Continued.

I. Actual Surgery.

"What about the surgery you witnessed?" This is the question most frequently asked. Unfortunately, we had but one or two opportunities to see the surgeons at work. One morning, in the course of hospital inspection, we saw three operators at work in as many institutions. The first surgeon was operating on an ectopic pregnancy, in which a primary rupture had occurred, and the patient was exhausted by the serious hemorrhage. The operation was skillfully performed. In another operating room the surgeon was doing a careful dissection on a strangulated inguinal hernia, under a local anaesthetic. An eight-inch, gangrenous intestine was revealed. The operation was ably managed under surroundings that were perfectly safe, although the operator was undoubtedly surprised at finding himself the observed of the premier surgeon. In a neighboring hospital we witnessed an appendectomy. A gangrenous appendix was removed in the routine way. The morning's observation revealed surgery equal to that of the best hospitals of New York City, Chicago, and Rochester.

In other cities we witnessed parts of procedures, and in each instance the surgery was apparently of the highest class. I am quite sure that Lima, Santiago, Valparaiso, Buenos Aires, or Montevideo could entertain a surgical society of the United States or Europe and give a surgical demonstration that would reveal a broad experience, approved facilities for diagnosis, recognized technical ability, and a fundamental knowledge of surgery that could not be excelled anywhere.

II. Panama.

It is now well recognized that the Panama Canal could not have been completed if it had not been for the sanitary regulations that were devised and enforced in connection with the work of digging and constructing. The medical corps of the United States Army was responsible for this accomplishment. This corps, through the self sacrifice of its members, revealed the course of ma-

laria and yellow fever, and discovered and applied the remedy. The miracle of the completion of the Panama Canal could not have been attributable to Theodore Roosevelt alone even if it had been necessary to occupy much more territory; nor to General Goethals alone even if the Culebra slides had been multiplied ten times; but to that lovable man who, with his associates of the medical corps of the army, applied the rules of modern sanitation, rules based on fundamental discoveries, and administrative regulations formulated by this same great scientist, Major General William C. Gorgas.

III. Major General William C. Gorgas, M. C., U. S. A., Retired.

One does not wonder that General Gorgas loves the beautiful spot that his genius made possible, and that he saw rise from a tropical jungle of pestilence to a paradise for men—the destined garden spot of the world.

Once while General Gorgas and the writer were waiting for an interview in the office of the Secretary of War, we spoke of the horrors of the war in which we were both so busily engaged. I remarked to the General that it must seem to him that fate had pursued him pretty closely; after all the work he had done in sanitation to be suddenly called upon to raise an army of civilian doctors for the greatest war of history. "Yes," he said, "I wish the horrible war was over." I said, "What is the very first thing that you would do General Gorgas, if tomorrow morning, before arising, you should receive a telephone message assuring you that the war was ended?" "Do you know what I would do?" he asked, while his eyes had a far-away, wistful expression. "I would ring off, call New York City and order a passage for South America. I would go to Guayaquil, Ecuador, the only place in which yellow fever is prevalent, exterminate the pestilence, and then—and then return to Panama, the garden spot of the world, and end my days writing an elegy on yellow fever."

And this was not the mere day-dreaming of a man overwhelmed by a stupendous job, but the real yearning of a peace-loving man, who, within a month after the armistice, accepted a commission from the Rockefeller Foundation to go to Guayaquil, Ecuador, to do the very job that he wished to do.

While Dr. Mayo and I were visiting

the President of the Republic of Peru, he spoke affectionately of General Gorgas and said that three of the South American Republics—Peru, Ecuador, and I believe Colombia—had appointed General Gorgas the official Inspector-General of Sanitation for the western coast. Unfortunately, we missed General Gorgas at Panama, as he was on his way south and we had passed each other en route without realizing it.

IV. Senior Javier Prado.

We were afforded the pleasure of visiting Senior Prado at his palatial home, with its private museum containing antiquities of the ancient Peruvians and of the Incas of the pre-Peruvian age. Senior Prado is a son of a distinguished Peruvian who was president of the republic at the time of the last war between Peru and Chile. He has gathered one of the most complete collections of ancient Peruvian pottery now in existence. Many rooms of his home are filled with unusually beautiful coco bolo and mahogany carvings. His art gallery contains some of the finest works of Peruvian painters. He has collected from France and Italy excellent bronzes, marbles, miniatures, and fans. One of the sleeping rooms is a marvel with carved furniture and cabinets of native coco bolo and mahogany, while the polished floors are covered with some of the most perfect Vicuna rugs that we saw in South America. From the windows one viewed the patio, which is a particularly artistic feature of this palace which is situated in a country where tropical gardens of great beauty are seen everywhere. An interesting room is one which contains many busts and the family portraits, a number of which are likenesses of his illustrious father in the gorgeous uniforms of his time with many decorations. Senior Prado is a most charming host, and he is extremely modest in exhibiting his treasures. One of the marvels of his collection is a room filled with the skulls of Inca chiefs, many of them having been distorted and reduced by cunningly devised pressure apparatus used by these aborigines. The Senior's secretary brought two of these precious skulls to Dr. Mayo and myself at our hotel in Lima. These are mementos that we shall prize forever as reminders of an enjoyable visit to a most interesting man.

V. Honorary Fellowships.

Honorary Fellowships in the Sociedad de Cirugia del Peru were conferred upon Dr. Mayo and myself, under interesting auspices. The ceremony occurred in the main lecture room or amphitheatre of the Medical Department of the University of San Marcos. This university, by the way, was established just one hundred years before the founding of Harvard University, making it by far the oldest university on the two American continents.

We assembled in the main lecture room, on the large platform of which were the members of the Sociedad de Cirugia and of the Faculty of Medicine of the University. The President, Dr. Juvenal Denegri, occupied a seat at the center table, with Dr. Mayo and myself at either side. Flanking us were the members of the Faculty and of the society. On the main floor of amphitheater were about two hundred students. The back of the amphitheater opened onto a court filled with tropical plants, palms, and flowers. This could be seen through an attractive colonnade which outlined the assembly hall. The students, a splendid group of young fellows, were in their places when we entered and filed onto the platform. They rose in a body and cheered and applauded for several minutes. It was a reception that was rather stirring, and warmed our hearts to the future medical profession of Peru.

The President, Dr. Denegri, read an address of welcome to the two candidates for Honorary Fellowship. In the meantime, we had received copies of the English translation of the address. A second address was read by the Secretary of the Association, Dr. Francisco Grana. The Honorary Fellowships were then separately conferred by the President, and engraved parchment certificates presented to us as evidence of this honor.

As Dr. Mayo rose to speak, he received an ovation from the Faculty and students that plainly deeply touched him. It was some time before he was allowed to express his pent-up feelings and to say to them how much we appreciated the honor they had just conferred upon us. He then described the object of our visit to South America. My own talk was received with an enthusiasm that I was at a loss to understand.

In responding, the most I could do was to congratulate everybody on something: the splendid body of students for being educated in the oldest university on the Western Hemisphere, in a medical school with a seven-year course; the Faculty for being privileged to teach in the university, with such an attractive student body; Dr. Mayo and myself for being so fortunate as to be privileged to visit this institution and to receive such a reception. The brief talk was suddenly terminated and was followed by the most enthusiastic applause, too much for the conventional and rather commonplace talk. It occurred to me that there was some compensation in being brief and in speaking in an unknown tongue. It transpired, however, that these were not the reasons. It seems there has been quite a partisan controversy in the medical department over the length of the course, viz., the seven-year requirement for a medical degree. This had been discussed pro and con with considerable feeling, the students being divided into two factions, one opposing the long course and the other upholding it. In congratulating them on the seven-year course, I had used the sign language by holding up seven fingers to emphasize my speech. Each of the two groups to the controversy interpreted my remarks as favoring its contentions; hence the outbreak. As a matter of fact, Dr. Mayo and I soon found that our talks when brief and least understood were most heartily received.

VI. Importance of Standpoint.

Dr. Mayo, as we all know, is the philosopher of practical surgery. We may not have thought of him as a philosopher-poet, but on a number of occasions on this remarkable trip of ours the claws of practicality were padded, and in the purple atmosphere of the southern continent the poet emerged. "In coming to South America," he said to the Secretary of State of Uruguay, "we have succeeded in changing our standpoint. In our northern continent we live under the polestar, and our whole view is from the standpoint of the northern heavens. Now we have visited and viewed for the first time the heavens of the southern cross, and with this experience our range of vision has been broadened and the expanse of our standpoint has been doubled. In the future,

America will mean to us all-America, including that under the polestar, and no less that under the southern cross."

VII. Survival of the Fittest.

How little do we know of the people of the southern continent! We were accustomed to thinking of them as the inhabitants of a number of small republics which would compare in area to so many of the states of our own country. In our ignorance we considered them, of necessity, more or less provincial. Our idea is now changed. Instead of being provincial in their attitude toward life, we found the peoples of South America to be the broadest and most cosmopolitan in the world. And why shouldn't they be? The continent of South America, including the Central American states, was the first to be explored by European countries. Taking Peru as an example, review for a moment its history. It had an ancient civilization that antedated by several centuries the discovery of America. This race was overrun, and after a prolonged struggle it was conquered by armies of Spain, led by the most competent adventurers. With the subjugation of the Incas, the Europeans intermarried with this strong race of natives, and for four hundred years this melting-pot has been fed by the men and women of vision and adventure of Europe—England, France, Italy, Germany, and Holland—and from it has emerged a strong nation of self-reliant Peruvians, which represents the survival of the fittest of centuries of evolution.

And that is how they appear! They are of strong physique, self-reliant in attitude, their strength of character predominates, and they are ambitious for self-education; they are not satisfied to retain a local outlook; they are not as we are prone to be—selfish in our preparation for intercourse with the world; they, most of them, know and cultivate at least two continental languages besides their own; they seek a classical education at home and supplement this with world travel and study abroad; they are people of strong temperament and broad vision, and they are interesting in their social intercourse with each other and with the strangers within their midst who are properly vouched for. And here, in a country that is a paradise of beauty, a wonderful people is pursuing its life, conscious

of its worth, and with a world experience that compares favorably with the best of its continental confreres.

And what applies to Peru is equally true of Chile, Argentine, and Uruguay—similar experiences, similar conquests, similar European emigration, similar yearning for independence; fertile land, mountains that are filled with minerals, and climates that attract the lovers of life; these are the ingredients of a melting-pot that has evolved a new people in a new civilization that cannot longer remain unrevealed.

VIII. A Double Conquest of Peru.

From the Log, January 25. A day of rest after three strenuous days of business, pleasure, and interest in Peru. It is Sunday. The festivities are over and the guests have departed. It is in the small hours of the morning; the floors of the deserted halls are still covered with confetti; and the few guests remaining are talking over the triumphs of the party. Strenuous entertainment transpires so rapidly that one fails to grasp all of the thrills of it until he reviews it in retrospect. So with the visit to Peru. The three days spent there will become more and more interesting and important as time goes on. In talking it over, Dr. Mayo and I feel that we have been veritable Pizarros—Dr. Mayo the leader and the rest of us his lieutenants. We have brought down certain ideals and our object has been to reconquer Peru. Our victory is different from the old one in that those whom we came to conquer have outgeneraled their adversaries and conquered us.

And so Pizarro sits this Sunday morning under a white canopy on the deck of his flagship, surrounded by his faithful adherents, and enjoys a day of rest. The coast of the conquered continent is within sight, and over the rugged hills of the shore-line occasionally appear the snow-capped peaks of the second tier of mountains. We are just under the line of the sun on its excursion back from the Tropic of Capricorn, and the rays are perpendicular. But Pizarro and the conquering army care not because the Humboldt current with its cool water from the south pole has also brought a gentle, cooling breeze. So while the church bells in all parts of the world are calling the men and women to worship, and to observe their prosperous neighbors' apparel, we

too take stock and give thanks for the wonderful new friendships we have made. But the chief, in his thirst for conquest, is drawing a new line on the map of the continent—a red mark which extends to Chile, Argentine, and Uruguay, and the ship turns its prow in that direction.

IX. Dr. Marcelino Herrera Vegas.

Dr. Marcelino Herrera Vegas, who is easily the dean of surgery of the southern continent, is a man whom it is an exceptional honor to know. He has the face of a seer, and he possesses a sensitive, aesthetic temperament. He is of a family of distinguished Argentinians, the estate of which dates back to the foundation of the Republic. His town residence is a palace—the repository of works of art in painting, sculpture, literature, and the furnishings of a refined household. His library, with its gallery, is a cabinet of exquisite taste and appropriateness. With his own hands he has cross-indexed and catalogued the contents. The books, all his friends, are clothed in appropriate and substantial bindings, as he would dress his sons and daughters whom he loves. He writes with his own hand his literary contributions and gets recreation by making his own research. When his eyes and brain are tired, instead of playing games, he practices his languages and reviews his poets by writing plays in long-hand and by copying his favorite poems. He has twice written the plays of Shakespeare in long-hand to aid him in perfecting his English. To illustrate some point in conversation, he occasionally quotes to you a thought from an English, German, French, or Spanish poet, and then repeats the exact words with the interrogation: "Do you remember?" And, of course, as a rule you do not. Men of his class seem to have sufficient time in which to crystallize their knowledge, and they have a knack of utilizing their learning without appearing ostentatious. Dr. Vegas would rather know thoroughly the great thought of a master, in order that he might live it, than be the originator of something but little better than the commonplace. We, in rapid-fire America, must seem crude and immature in comparison with the associates of this man who reads his classics, and who has gained for himself a knowledge of the best of the ages. And with it all he is a

practical teacher of surgery; he is a skilled operator; he endeavors to redeem the cripples and to save the lives of the poor of Argentine; he is a scientific man in the understanding of his art; he visits hospitals, dresses wounds, is a time-server, follows schedules, and consults time tables. When the summertime has come and he is through with his classes and the day's work is done, he does not employ his time in useless play, but goes to his hacienda and lives with the out-of-doors, the companions of his estate, and supervises the cultivation of the land. He watches trees grow that were planted by his grandfather, and he plants trees that will be watched and enjoyed by his grandchildren. This is our friend as we learned to know him—a superb character, a true gentleman, and one who is greatly admired by his confreres.

And this is the type that we met among the professional men of the cities of the four South American republics which we visited. We found a premium placed upon education, a knowledge of the languages, and experience gained in foreign travel. The cultivation of the finer graces is encouraged. The study of art, literature, and music of the highest quality is pursued, and a knowledge of the finer arts is considered essential to good breeding. I wish that all of our friends could know as we do these outstanding characteristics among their maturer men, who are so honored and looked up to by their younger followers and admirers—Gregorio Amunategui, Alberto Adriasola, and Lucas Sierra, of Chile; Marcelino Herrera Vegas, Daniel J. Cranwell, and Pedro Chutro, of Argentine; A. Ricaldoni, Enrique Pouey, and Gerardo Arribabalaga, of Uruguay; and Juvenal Denegri, Miguel C. Aljovin, and Guillermo Gastaneta, of Peru.

X. The Romance of a Dental College.

February 13. An interesting diversion this morning was a visit to La Escuela Dental, the dental department of the University of Chile, at Santiago. The Dean, Dr. Jerman Valenzuela, was our host and conducted us through a modernly equipped dental school. This institution has accommodations for three hundred students. Each student has a complete equipment, including a dental chair, instrument cabinets, instruments, supplies, and a laboratory

for conducting a scientific clinic in dentistry. The building covers an entire block and is two stories in height. It is comparatively new and splendid architecturally.

Attached to the founding of this department of the university is an interesting romance which involves the supposed murder of a German Consul; the burning of the legation; the mysterious disappearance of the janitor of the building, and of a large sum of money belonging to the Consul's country which had been taken from the safe. A search among the ruins revealed the body of a man, much disfigured, on which were found the shirt-studs, cuff-buttons, and other personal effects of the Consul. The Chilean Government was much humiliated by the atrocious murder, and proceeded to make amends for the tragedy in every possible way. The official received a magnificent burial, and the state vied with the municipality in doing honor befitting the station of the deceased and the country which he represented. During the inquest, Dr. Valenzuela, the dentist, requested the privilege of examining the jaw and teeth. He made careful notes of his findings. He discovered that the murdered man had splendid teeth without fillings or defects, and that one wisdom tooth was missing. He then consulted the wife of the Consul and learned that her husband had had defective teeth and had been the subject of considerable dental repair. The wife of the janitor stated that her husband had had perfect teeth and had consulted a dentist on but one occasion, when he had had a tooth extracted. This information, which confirmed Dr. Valenzuela's suspicion, was communicated to the proper authorities. The investigation that followed led to the capture of the official who had become snow-bound in the Andes in his attempt to escape with his bags of gold. He was brought back to Santiago, tried for the murder of the janitor and treachery to his government, and finally executed. In the meantime, the janitor had received a state funeral. He had been buried with great honor, and his remains placed in a mausoleum, as befitted the rank of an honored official of a great nation. The clearing of the mystery had relieved the Chilean Government of serious humiliation and embarrassment. Attention naturally turn-

ed to the unostentatious man who, by careful observation, had been instrumental in clearing up the international disgrace. What could the government do for him? He asked nothing for himself, but suggested that he had long possessed an ambition to build a model dental college for Chile. The Chilean Government asked him to present his plans, and the final result was the establishment of the thoroughly equipped institution that we visited today. We received a hearty welcome from this "Sherlock Holmes," Dr. Jerman Valenzuela, the Dean of La Escuela Dental, who has every reason to be proud of his ideal institution.

XI. A Demonstration of Efficiency.

The pace for many days had been a fast one. On leaving the dental clinic in Santiago, Dr. Mayo, who is always considerate of his associates, intimated that I was looking rather peaked and suggested that I return to the hotel for a little rest, as our afternoon was to be a strenuous one. This, to me, was a welcome suggestion. The officials accompanying us suggested that they utilize my incapacity to give us a demonstration of their municipal service. The city has developed a personal service organization. Any individual in distress may, in case of injury or sudden illness, call for aid from any public telephone. An immediate response is accorded in the form of an auto ambulance, with a medical attendant. We were fully two miles from the hotel. I enthusiastically consented to become the victim for the experiment. A telephone call was made, and we were asked to time the response. In less than five minutes, considerable commotion was evident in the narrow street, and with a rush an attractive, clean ambulance landed at the curb. A white-coated official conducted me to the coach and placed me upon the couch. The ambulance turned and, working continuously a three-noted siren that could be heard for blocks and which all traffic is bound to respect, started for the hotel and arrived within the prescribed time—five minutes. It was a wild ride, because it was an official demonstration, and the importance of time on this occasion seemed to be thoroughly appreciated by the attendants. However, we reached our destination without killing or maiming any people or dogs, and without catapulting any ca-

thedrals or corner drug-stores.

The Chileans are a progressive and efficient nation, and this is obvious to the casual visitor. The Chilean Government, Army, Navy and Municipalities all reveal thorough organization, thrift, and administrative ability of the highest order. The little demonstration referred to above was a practical illustration of their attention to detail.

XII. Our Method of Travel.

It was difficult for us to make arrangements by which we could cover the necessary territory and return within the reasonable time limit of not to exceed two months. We, therefore, took advantage of a travel tour which was organized by the American Express Company, and the details of their plan were so generously carried out that we have not regretted traveling in that way rather than independently.

Our ship was the "Ebro" with an English crew and management. This eight thousand-ton, twin-screw steamer was built especially for cruising just before the outbreak of the war. It was thoroughly well-equipped for tropical travel, and possessed luxurious, modern conveniences.

Itinerary.

January 7, Wednesday—Sailed from New York.

January 13, Tuesday—Kingston, Jamaica.

January 16 and 17—Panama Canal.

January 22, Thursday, to January 24, Saturday—Callao, the port for Lima, capital of Peru.

January 26, Monday—Mollendo, a typical Peruvian port.

January 27, Tuesday—Arica, a Chilean port, popular as a seaside resort. An excursion by rail to Tacna, the "oasis city."

January 28, Wednesday—Iquique.

January 29, Thursday—Antofagasta, the port through which most of the products of the Chilean nitrate fields are shipped.

January 31, Saturday—Coquimbo.

February 1, Sunday, to February 14, Saturday—Two weeks on shore with visits to Valparaiso, Santiago, thence by rail over the Andes to Buenos Aires, LaPlata, and Montevideo, on the east coast.

February 14, Saturday—Returned by rail to Valparaiso.

February 29, Sunday—Through the Panama Canal.

March 2, Tuesday—Another stop at Kingston.

March 8, Monday—Arrived New York.

XIII. Our Hosts of South America.

The Panama Canal has brought the western coast of South America—Lima, Valparaiso, etc.—within fourteen days of New York City, Chicago, or New Orleans. With a return to normal shipping conditions and a growing acquaintance with our South American people, a merchant marine, by mutual agreement, will soon develop that will make us the closest neighbors. And one needs to visit these countries but once to appreciate the great worth and charm of these neighbors.

We were privileged to make our visit under exceptional circumstances. We were practically official guests; but in the busy times we had an opportunity of sitting at the home tables and getting an insight into South American family life. Everywhere we were charmed. The young men and women, the sons and daughters of our hosts, were interesting to study. In their education they are early trained in the arts, in the classics, and in the languages. The young women cultivate their music, and on a number of occasions we were thoroughly entertained by the daughters of the families playing with unusual skill the classics of Chopin, Liszt, and other composers with thorough ease and enjoyment. The young men are ambitious, and all of the young men and women have either spent a year or two in European travel, or are planning to do so. In their preparation for such travel, they have almost invariably learned English and French. And while in the past they have looked almost exclusively to Europe as their travel ground, they are now talking of America, and this spirit of friendliness and appreciation for the United States is materializing rapidly and nothing will develop their attitude more than visits by us to their countries. We must lay aside our provincial airs and cocksureness, and be willing to broaden out as they have done, learn their language as they have learned ours, and make ourselves worthy of a cosmopolitan friendship.

After visiting a few of these wonderful countries, the United States grows smaller in one's estimation, and the only way we can keep it big is to be willing to broaden out as citizens. Many representatives of the medical profession of South America will visit the United States in the next few months and years. Let us look to our laurels! Remember that they have hospitals which are equal to our best, and most of them are much more attractive. Remember that each of their principal countries has a national medical university as thoroughly equipped as are our own, with world-trained faculties, and a seven-year curriculum as compared with our four and five-year courses. Remember that the man you are entertaining has not been satisfied with the advantages afforded by his own country, but that he has also observed the best in France and in Germany. Remember that you are associating with a man from a country where a classical education is the pre-requisite of a gentleman. The United States now has the opportunity to enter into competition with the countries of the world as a medical-educational center. There is but one way to make good, and that is to utilize our great resources to the fullest extent and to do it with the realization that we are only one of the many nations which possess unusual resources. If it is possible, let us cultivate modesty, and the best way to do that, and certainly a pleasant way, is to visit the medical profession of South America.

Franklin H. Martin

WOOD ALCOHOL MENACE.

Owing to the heavy increase recently noted in the number of deaths and cases of blindness resulting from the drinking of wood alcohol by those ignorant of its dangers, the National Committee for the Prevention of Blindness, 130 East Twenty-Second Street, New York, is sending broadcast special warnings of the tragic consequences which may follow the use of wood alcohol, denatured alcohol and medicated alcohol for beverage purposes.

The harmful action of this poison comes not only from taking it internally, but may likewise be induced by

breathing its fumes, and by absorption through the skin. Its effect is usually noticeable very shortly after exposure.

Only within recent years has wood alcohol become so dangerous to life and sight. Formerly it was a dark, bad-smelling, bad-tasting fluid which no one was tempted to drink. Later, a process was developed by which this color and taste are removed. Wood alcohol when purified in this way, looks, smells and tastes like grain alcohol, and may thus be easily substituted for it by unscrupulous persons.

One teaspoonful of wood alcohol taken internally is sufficient to cause total blindness—a larger quantity often causes death. If you value your eyesight or your life, never use wood alcohol, denatured alcohol or medicated alcohol for drinking purposes. Pass this knowledge on if you would assist in reducing the fatalities which are occurring from this cause.

AN EFFICIENT PALATABLE CASCARA.

To have at your disposal a cascara preparation that is really palatable, and that represents at the same time all of the laxative constituents of the drug with the exception of the bitter principle, is "a consummation devoutly to be wished." A prescription for Cascara Evacuant will bring to your patient just such a preparation. The method of removing the bitter principle, it may be noted, is original and exclusive with Parke, Davis & Co.

In the preparation of the so-called "aromatic" cascarias, alkalies, which are ordinarily used to destroy the bitter glucoside (as directed by the Pharmacopoeia), seem to injure some of the other laxative constituents of the bark. Cascara Evacuant, on the other hand, represents the entire therapeutic virtue of cascara minus the bitter principle, which is removed by an ingenious chemical process that leaves the rest of the drug unaltered. This explains why the manufacturers do not need to add purgatives to this palatable preparation to make it efficacious.

In chronic constipation divided doses of Cascara Evacuant—about twenty drops t. i. d., before meals and at bedtime—will induce regular evacuations without griping. Gradually the dose should be decreased as a regular stool habit is restored.

The New Charlotte Medical Journal

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CHARLOTTE, N. C.

"Read not to contradict and confute, nor to believe and take for granted, nor to find talk and discourse, but to weigh and consider."—Francis Bacon.

QUACKERY—A QUACK.

"A boastful pretender to medical skill; an ignorant practitioner."

To those who go to church there comes the memory of some preachers who preach "hell-fire" and others who extol the beauties of heaven. The former does so no doubt with the object of emphasizing its antithesis. The antithesis of "Quackery" we choose to call "Conscience." The late J. P. Morgan enjoyed his unparalleled standing in the financial world chiefly because every other financier believed that Mr. Morgan was honest to the core and that they could trust him to do what was fair and right.

Conscience is the parent of character and character will in the final analysis determine reputation.

The man who is acting contrary to his conscience always feels that his feet are on a quick sand.

"Today cupidity is synonymous with stupidity."

The man who has won millions at the cost of his conscience is a failure. Not only does he himself nowadays know it, but he realizes that the world knows it. If only we could begin to believe the truth of our "copy book maxims" before one foot is beginning to slip into the grave, how differently perhaps might those later years be.

"Conscience makes cowards of us all."—Shakespeare.

Similarly conscience makes brave men of us all. When we know we are in the right what courage we can muster. The person engaged in honest effort can apply his mind whole-heartedly to it. He

need have no shifty-eye or unsteady hand. He can do justice to his talents.

That man is a success who lives up to his conscience. Success, in a sense, is nothing but the possession of a good conscience. Certainly genuine success and a bad conscience cannot inhabit the same human being.

The demand today is for men of probity, men wholly upright with a 24-carat character and a clean conscience.

The tragedy is that even among so altruistic a class of men as doctors there are those so immersed in money making or popularity making that we allow our conscience to become dull, and keep it dull until our activities begin to fail and then we waken up too late to the fact that the game isn't worth the cost, that such material winnings cannot compensate us for the loss of our peace of mind.

A generation ago advertising was nine-tenths exaggeration and deception. Today it is nine-tenths clean and truthful. A generation ago much of a doctor's opulence depended on his ability to pull the wool over non-suspecting patient's eyes now—thanks be—it is depending more and more each day on honest, un-camouflaged, true merit. In no sense belittling a real place in medicine for an honest application of "psychology" yet the people don't want Quackery in any style you may choose to serve it to them.

The experience at the Officers' Training Camps of the Army in determining the fitness of thousands of self-styled specialists showed how lamentable conditions were among men who, after a few months in a metropolitan clinic, had returned to their homes as specialists and then permitted the indulgent public to suffer through their mutual ignorance.

An ex-criminal, "Number 13," tells us in the Atlantic Monthly that "the great problem of the reformed criminal is to readjust his disposition so as to give conscience a chance to work." He credits conscience with being the arbiter of moral rectitude. The quack, and still there are plenty of ethical (?) quacks in the medical profession, has a dulled conscience, and the great problem is to readjust our scheme of things so that "boastful pretenses" and criminal negligence together with "ignorant practitioners" will find no place and no incentive for existence.

"MATERNITY VOLUNTEERS."

"A Remunerative Feminine Career."

One of the editors, Paul Carnot, of the *Paris Medical*, a leading French medical journal, has been writing a series of articles on the subject, "How to save two million French women from sterility."

France does not have a birth rate to compare with Russia, for instance, and as Dr. Carnot points out has two million more women than men. If as a nation it is to continue to be classed as a first class power it must in some way keep up its population. If these two million women are doomed to celibacy France will lose six million potential children. "The problem," he says "demands immediate solution, there should be some modification of current ideas as to the 'family' and of social responsibilities,—no convention, moral or social, it seems to us, is worth depriving France of six million births." Then he attempts to work out a system by which maternity—for unmarried women—may be made a "remunerative feminine career." He suggests that "maternity volunteers" be called for and paid by the state, with special prizes to be awarded for the physically fittest children. Apparently his readers, especially feminine readers, have welcomed the project quite enthusiastically.

This problem is not a pipe-dream, or the ideas of a visionary editor but is a formidable, after-war population problem which confronts other European countries today.

"The proof of the pudding is in the eating," and certainly all history teaches that those peoples of the world who have accomplished most and that seemingly have been happiest have been the people who have had reverence for the sanctity of a monogamous "home." Results have heretofore shown that when ideas akin to Dr. Carnot's get a foothold in the minds of a people there follows a decadence. Speaking for the French nation as an impersonal thing our American ideals say that France is better off without these possible six million births than to buy them at that price.

On the other hand a word must be said for these women themselves. Of the two fundamental instincts which dominate all life, probably the instinct

of perpetuating the species transcends the instinct of self preservation.

In every woman's heart there is, latent or outspoken, a true mother instinct, a desire for children and the mating is the means to this end, but whether mated or not yet that fundamental instinct is there. Fundamentally the instinct of self preservation can only be the means for the fulfillment of the greater instinct of perpetuating the species, therefore Dr. Carnot's plan would make possible to these two million souls the accomplishment of the supreme, transcendent instinct of life itself, and would certainly yield some measure of happiness.

Arguing further if the instinct of perpetuating the species is of paramount importance in the individual life, then secondarily the instinct of perpetuating the national life must also hold a prominent place. Therefore charity allows us nothing less than to consider this as a mute appeal of human life—begging in the name of two million women for motherhood and in the name of France for six million sons. The pathos of it is, all history tells us "it won't work." Tells these two million souls you are doomed to disappointment, that although it's no fault of yours, yet for the sake of future generations and a future France you must pay the price.

THE THYROID AND THE FEMALE SEX FUNCTION.

Bear, in the *Virginia Medical Monthly*, calls attention to the generally accepted theory that the thyroid is influenced, to a marked degree, by menstruation, pregnancy, and lactation. Men of trustworthy note, such as Aetius, Spraine, Hunter, Pettit, Waller and Langer hold that there exists a close relation between the thyroid gland and the organs of reproduction.

The Romans used to appoint a committee of matrons to measure the neck of the bride on the night of the wedding with a silk thread and re-examine it again the following morning, and if there was a slight increase, it showed that coitus had taken place; on the other hand, if there was no enlargement, coitus had taken place before marriage.

Gaskell says: "Perhaps the most striking result of the researches is the discovery that the thyroid gland is de-

rived from the uterus of the palestracan ancestor. The relationship which has been known from time immemorial to exist between the sex organs and the thyroid in man and other animals, and has still been a mystery without any explanation, may possibly be the last recollection of a time when the thyroid glands were the uterine glands of the palestracan ancestor."

Though these were once upon a time intimately united and are now widely separated, a strange coincidence continues to exist between the thyroid gland and the generative organs even up to the highest vertebrates.

The greater frequency of goiter during sexual life, both in male and female, indicates a close physiologic relation.

The greater frequency of goiter in the female and the greater susceptibility of this sex to experimental hyperthyroidism, the enlargements of the thyroid at puberty, at the menstrual period, at marriage, during courtship, during a period of excessive coitus, attending nymphomania, during pregnancy, during the puerperium, at the climacteric period and in uterine or ovarian congestions, indicates that there is an interrelation more active in the female than in the male.

OPTIMISM VS. PRACTICE.

George Henry, in the Medical Review of Reviews, says that suggestion may be defined as the implanting of dynamic ideas in a mind. One may practice suggestion on himself intentionally or unintentionally, or he may practice it on another unintentionally. The unintentional or unconscious suggestion, whether practiced on one's self or on another, is likely to be the more powerful. Unconscious autosuggestion is a powerful determiner of lives, and keeps some men groveling down in the depths, while it spurs others on to repeated successes.

Every physician, whether he wills it or not, whether he is conscious of it or not, is exerting either an elevating or a depressing influence upon every patient that comes under his care. If he is doubtful of the value of his remedies, if he thinks the only treatment worth while is the symptomatic and expectant, if he believes that all he can do is to make the patient comfortable and let

Nature do her worst, the patient will unerringly read his doom in the doctor's expression, and the words with which the medical man attempts to camouflage his thoughts will avail him nothing.

This is not to say that disease is of the mind. It is not. In every case of illness there is a fight between the body cells and the environment, particularly the germ of life that has gotten a little too near home for safety; or in case of severe injury there is the struggle of the tissues to repair the damage. This fight of the cells is one that often is pretty evenly balanced, so that a little aid will enable the cells to come out victorious, whereas an adverse condition may prove disastrous. The mind may thus be an aid or a hindrance to recovery, according as it is in a hopeful or in a despondent state.

We sometimes wonder why one man can report marvelous successes with a certain remedy when others checking up his work decided that the remedy is inert, having no effect whatever on the course of the disease. We can readily understand that the first man, knowing that sooner or later his report must undergo the scrutiny of other investigators, would not consciously make a lying report. Doubtless he obtains just such results as he reports. His patients recovered because he had every confidence in his remedy, and his patients somehow absorbed his optimism. The critics of the method naturally had no such optimism or enthusiasm. They were "from Missouri." They wanted some demonstration of the value of the remedy. In this critical attitude they certainly did not inspire their patients with much hope. Possibly they said perfunctorily some encouraging words (intentional suggestion), but all the time their attitude of scepticism acted as an unconscious suggestion, more potent than the conscious suggestion, and the result was they obtained results in accordance with their expectations. "According to thy faith be it unto thee."

Medical Education Donation.

Mr. John D. Rockefeller during the year added another \$20,000,000 to the general education fund which is to be used for the improvement of medical education in the United States. The interest and principal is to be distributed within the next fifty years.

BATHING AS A SOCIAL AMUSEMENT.

Many persons at the present time look on baths and bathing in the light of hygienic necessity. A study of the history of the bath, however, would reveal this institution as having many other aspects. Its various alleged remedial values are conspicuous in the practices and traditions of hydrotherapy. Bath resorts are proverbially medical centers in many parts of the world. In the ancient days the various modes of bathing and bodily inunctions acquired an immense significance in the life of the elite in particular, as is attested by the elaborate ruins still extant, giving silent evidence of the place of the bath amid the domestic institutions of other times.

The counterpart to a visit to what is left in Rome of the baths of antiquity may be suggested by a trip to the Hot Springs or Carlsbads of today, even though the functions of the modern establishments may appear to be somewhat different. Lest it be assumed that our own continent is devoid of old records of bathing pavilions of a specialized sort, we quote the observations of the pioneer American explorers Lewis and Clark. In the diary of their memorable expedition up the Missouri and across the divide to the Pacific coast in the years 1804-1806 they give a unique description of the sweating baths of Indians they encountered. The vapor bath or sweating house was a hollow square six or eight feet deep, formed in a river bank by damming up the other three sides with mud and covering the whole completely except for an aperture about two feet wide at the top. The bathers descended through this hole, taking with them a number of heated stones and jugs of water; and after being seated around the compartment they threw the water on the stones until the steam became sufficient for their purposes. This mode of producing vapor appears to have been common.

From the social standpoint it is interesting to learn through the account left by Lewis and Clark that among many of the Indian tribes it was very uncommon for a man to bath alone. The bather was generally accompanied by one or sometimes several of his acquaintances. Indeed, according to the explorers' information, bathing was so essentially a

social amusement among these peoples that to decline going in to bathe when invited by a friend was regarded as one of the highest indignities that could be offered to him. The Indians on the frontiers nearest civilization generally used a bath which was formed of a wickered work of willow about four feet high, arched at the top, covered with skins, and adapted to a single person. In this the "patient" sat until, by means of the heated stones and water, he perspired sufficiently. Almost always these baths were in the neighborhood of a running stream, into which the Indians plunged immediately on coming out of the vapor bath, and sometimes returned again to subject themselves to a second perspiration. "This bath," we read, "is employed either for pleasure or for health, and is used indiscriminately for rheumatism, venereal or, in short, all kinds of diseases." The same sentence might quite as appropriately be written today.—*Jour. A. M. A.*, Aug. 14, 1920.

MEDICINAL PLANTS OF DIXIE.

It is of passing interest to note that the Southern States are particularly rich in medicinal plants, indeed the South has a very great proportion of all the medicinal species of the country and has around one hundred exclusively her own.

We have seen the statement that a single circumscribed area but 10 miles in diameter in the southern section of South Carolina furnished one and one-third more than the entire State of New York.

The fact may not be generally known that for many years a great proportion of the medicinal material used by eclectic physicians has been gathered in the mountains of North Carolina by the local root and herb gatherers.

The current story of the introduction of Gelsemium into American Medicine is told in the American Dispensatory. The story whether true or not is typical of the "discovery" of the medicinal virtues of many herbs. A negro servant gave to his master, a Mississippi planter, a strong decoction of yellow jasmine root, mistaking it for another plant, for bilious intermittent or malarial fever. The result of his error was the profound prostration of physical power near unto death, but ending in a permanent cure of the patient.

Urology

A. J. Crowell, M. D., Department Editor

Dr. A. Raymond Stevens, in the *Journal of Urology* June 1920, in an analysis of results obtained by the different surgical procedures for the cure of prostatic abscess in Bellevue Hospital, came to the conclusion that those opened into the posterior urethra by the use of a metal sound gave the best results.

The methods employed were, A, drainage into the posterior urethra, (1) through a suprapubic intravesical approach, or (2) through a perineal incision opening into the membranous or bulbous urethra. B, drainage into the rectum in selected cases. C, drainage into the perineal space through the posterior prostatic capsule, after a careful dissection between the prostate and the anterior rectal wall.

This analysis shows the length of time the patients were confined to the hospital following all the methods employed,—except opening the abscess into the prostatic urethra by the use of a sound,—was thirty-one days and that by the latter method only six days.

We believe none of the above named methods good but of the different procedures, the last named the best. We think drainage into the posterior urethra through a suprapubic opening very poor surgery, that of opening the abscess into the urethra entirely unnecessary and that of opening it into the rectum out of date by at least fifty years.

The ideal operation for this condition is to expose the prostatic capsule through a Young's perineal incision and open the abscess freely without getting into the urethra, obtain immediate relief from the symptoms and give perfect drainage to the gland. In this way you not only drain the gland but also, if necessary, the seminal vesicals. We have done this operation on a great many cases of prostatic abscess and with very excellent results indeed. It is unnecessary for the patient, as a rule, to remain in the hospital more than four or five days, following this plan of procedure and the after results have been excellent.

Gynecology and Obstetrics

Robt. E. Seibels, M. D., Department Editor

Fibromyoma Uteri—Basing his argument mainly on the occurrence of epithelioma in the conserved cervical stump, and secondarily on the persistent leucorrhoea that often follows, Polak (J. A. M. A.—1920, LXXV, 9) enters a most convincing plea for total hysterectomy as the operation of choice in parous women. He collected reports of two hundred and fifty-six cases "in which cancer has occurred in the cervical stump after subtotal hysterectomy for fibroids," and he quotes a report where routine serial section in more than nine hundred total hysterectomies showed coexistent carcinoma in more than two percent of all fibroid tumors of the uterus.

This author gives a very simple technique, well illustrated by drawings of his procedure. He claims that the vagina is not materially shortened by the operation and that in his hands the mortality is only 0.5% higher than in sub-total hysterectomy.

We can all testify to the annoyance which the persistent leucorrhoea post operation, gives rise to: especially is this true in the specific cases. We believe that the complete operation is equally applicable when the removal of the uterus and adnexae for pelvic inflammation is contemplated.

The Care of the Nipples During Lactation: One of the results of the "jazz age" in which we live is the tendency of young mothers to seize any excuse to discontinue nursing their babies at the earliest possible date. If tenderness of the nipple occurs, they suffer more or less acute pain during the nursing and for some time afterward, and even the most sensible mother will look forward to the feeding hours with dread on this account. If the tenderness is followed by fissures or cracks, a serious situation is present, not only because the cracks are difficult to heal but because the mother is inclined to stop the nursing before the breast is empty—the baby goes hungry—an infection may take place—and suppurative mastitis may appear.

With but few exceptions tenderness is the result of inattention, and cracks of grave carelessness, on the part of the doctor, primarily. He must see that the nurse and the mother prevent the tenderness from arising and must prevent the nipple from cracking.

In the antepartum months, the expectant mother should bathe the nipples daily with some cleaning and mildly hardening solution. Boric acid, half ounce to 50% alcohol ounces eight is excellent.

The whole story of the success is cleanliness and taking care. The baby's mouth should be carefully wiped out, before he is put to breast, with boric acid solution. The nipple is then carefully cleansed with boric acid. After the nursing, the nipple is again washed with boric acid and a square of sterile lint, with sterile vaseline, is applied to it to prevent the nipple from becoming stuck to the breast binder by the dried secretion.

If an abrasion occurs, the glycerite of Tannic acid, witch hazel, or 50% alcohol compresses are soothing. If an actual crack should develop it may be touched with 10% silver nitrate and nursing should be discontinued on that breast for twelve to twenty-four hours. In the presence of a crack, it is seldom wise to use a nipple shield as this tends to pull the edges of the crack apart. The shield may be used, however, once a day to rest an abraded nipple.

The use of one bottle a day not infrequently has helped to carry a reluctant mother through the nursing period. Used in place of one breast feeding, it gives her a rest and opportunity to be away for half a day, and is especially helpful when it is desired to omit one or two feedings on a sore nipple.

MILLION FRANC MATERNITY HOSPITAL FOR CHALONS.

Ground has recently been broken for the erection of a model maternity hospital at Chalons, France, to cost one million francs. The undertaking is financed by the Friends' Unit of the American Red Cross, partly from funds which are the proceeds of cost sales of supplies to inhabitants of this region and partly from direct gifts. English Quakers are also participating in the

work, which is described as a "venture in international friendship."

The hospital, designed to take the place of the temporary dispensaries, hospital and babies' clinics that have sprung up throughout the devastated regions in wooden barracks provided for the purpose by the American Red Cross, will be the most complete and modern institution of its sort in France. Two American and two English nurses will insure a permanent coordination of the clinical methods of their countries with those of France. About sixty endowed beds will be set aside for the free use of the people of Chalons and neighboring villages.

The need for an institution of this sort has been met till now by a temporary maternity clinic which received a thorough equipment from the Red Cross. The returning flood of refugees to the devastated regions of the Marne valley however, swamped the resources of the existing institution and a new building was decided upon.

Orthopaedics

Alonzo Myers, Department Editor

A summary of an article in the Journal of Orthopaedic Surgery, by Gordon Watson on Internal Derangement of the Knee.

The author points out that tears of a semilunar cartilage, according to experimental evidence, occur most easily during the final stage of extension, whereas clinical evidence shows it most likely to happen when the leg is partially flexed, abducted and rotated outwards. In about half the cases the tear is longitudinal and longitudinal tear may involve the anterior part only, the whole cartilage, or the posterior portion. The external cartilage is affected in only 10 per cent of the cases.

The usual clinical history is of severe pain with locking followed by swelling. Sometimes a crack is heard at the time. Recurrence from trivial causes is common, and in the interval there is freedom from symptoms. The more chronic the condition, the less severe is the pain. The diagnosis depends largely on the history. In long-standing cases, relaxation of the internal lateral ligament and thickening of the synovial mem-

brane may be detected. Nipping of the synovial fringes is distinguished by the symptoms being less marked and by a history of chronic disease. Locking from loose bodies may simulate injury to a cartilage, but at some time or other these may be located in a superficial position; the diagnosis can be confirmed by roentgenogram.

Injury to the crucial ligaments and fracture of the tibial spine are always the result of severe violence. If the anterior crucial ligament is torn while the posterior remains intact, the tibia in the extended position can be made to slide forward on the femur, while if the posterior is torn and the anterior intact, the tibia can be pushed backward on the femur without flexion.

Operative Treatment of Spinal Tuberculosis.

A recent article in the *Edinburg Medical Journal* by John Fraser, F. R. C. S. seems of special interest because of the stress laid on details and precautions preliminary to operation.

While the tendency has been to minimize the operative treatment of bone and joint tuberculosis in children, the operative treatment of spinal tuberculosis has increased in popularity. The two classes of operation have very different objects in view, for in the latter no attempt is made to eradicate the disease but to secure what may be called an internal splint of bone, and so to induce by fixation of the part a more efficient natural cure. The types of operation generally performed are those associated with the names of Albee and Hibbs.

Henderson, of Mayo Clinic, in the most recent paper on the subject reports 81 cases of Pott's disease. He claims a proportion of cures amounting to 43 per cent and in his series, there were no operation deaths.

The success of bone grafting and osteoplastic after Hibbs for spinal tuberculosis has now become definitely established but there are certain details of the method which must be adhered to if ultimate success is to be gained. Alkalies and carbohydrates should be administered for some days previous to operation and chloroform should not be employed as the anaesthetic of choice. The precautions are necessary owing to the frequency of an acidosis in prolonged bone operations in case of chil-

dren. If a graft is necessary, instead of the graft being placed between the split vertebral spines, it may advantageously be laid laterally along the sides of the spines. As the whole idea is to induce the formation of new periosteal bone and so secure efficient internal splintage, it is most important to separate the periosteum widely from the spines, laminae, articular and transverse processes. Only by so doing can a sufficiency of new periosteal bone be formed. A spine which has been efficiently treated should at the end of six months show an appearance as though a quantity of liquid wax had been formed over the posterior surface of the spine—so profuse should be the new bone formation.

Attention must be drawn to the danger of rough handling under the anaesthesia during the operation. The support of the erector-spinal muscles is gone and the spine may buckle or dislocate backwards if any unguarded movement is made.

OBJECTIVE SYMPTOMATOLOGY OF FOOT STRAIN.

According to Albert H. Freiberg, Cincinnati (*Journal A. M. A.*, Aug. 14, 1920), persons who have symptoms which may be attributed to weakness of supination and adduction of the foot practically always have tenderness of the insertion of the tibio-calcaneal ligament into the sustentaculum tali, or at its posterior extremity. In such persons the tenderness is usually called forth by a pressure of less than 2 1-2 pounds. Most often the reading will be from 1-2 pound to 1 1-2 pounds. Many persons who have no foot symptoms have tenderness on pressure over this point; this is also true of many persons who have no symptoms attributable to the lower extremities at all. In this group of persons, pressure of 2 1-2 pounds or more is usually required to call forth tenderness. Most persons with strong, symptomless lower extremities are not tender on pressure over the sustentaculum. This tenderness is to be regarded as indicative of potential weakness in adduction and supination. This is true in proportion to the ease with which tenderness is called forth. Further and more extensive experience with this test is necessary before ascribing to it a definite place as a diagnostic measure.

State Medicine

L. B. McBrayer, M. D., Department Editor

THE LOSING BATTLE AGAINST DISEASE.

The great struggle against the captains of disease and death has been filled with long battles, and marked by glorious victories. Small-pox robbed of its terrors, yellow fever conquered, typhoid fever reduced to a disease of minor importance in most self-respecting communities, whole countries made safe by sanitation,—these are a few of the conquests of preventive medicine.

Unfortunately, the tactics, the methods of preventive medicine, cannot be applied to the control of many of the remaining scourges affecting society, such as tuberculosis, cancer, kidney and heart disease. No simple weapon like vaccination, or the destruction of germ carrying insects will win against these great torturing and death dealing enemies.

Many diseases are actually gaining against us. Our armies of physicians lack generalship and organization—they are not using the best modern weapons. Seventy per cent or more of any typical population group is in need of medical or dental advice or treatment, for minor or serious ills. How many are ever brought into contact with corrective medical advice? How many are advised or treated while the affection is in its incipency? How many, even when brought under medical surveillance, receive competent and thorough-going advice or treatment? In what percentage are the laboratory and other technical "instruments of precision" for diagnosis and treatment, although theoretically available for all, actually applied? Why do so many physicians everywhere, in spite of state provision, still make or fail to make diagnosis of diphtheria without throat cultures, or of syphilis without a Wasserman?

Recent surveys have shown that there exists in normal communities three times as much active tuberculosis as is usually under observation. Why is it that in most communities 20 or 30 per cent of the tuberculosis cases first come to the knowledge of the health authori-

ties when reported at death? How infinitesimal is the percentage of surgically curable cancer that is detected in time? What health officer is bold enough to claim that even a substantial proportion of the venereal disease in his community is receiving adequate medical treatment? How many adults or children in the typical urban population ever receive an annual medical inspection—admittedly essential to the detection of early disease and to the victory for health?

The present method of unorganized private medical practice, devoted and conscientious as are the rank and file of the profession striving individually to meet these problems, has been tried and found wanting. Real progress in all allied fields has resulted largely from organized research, from the use of social devices, such as health departments, sanitary commissions, etc. Can private practice, through socialization, win the battles it is losing now?

The individual doctor is a victim with those he is seeking to serve, rather than a promoter of the present system of medical practice. Medicine suffers from the semi-anarchistic, individualistic organization of social life. In every field, leaders are seeking an adequate program. In medicine, as elsewhere, progress, or even the experimentation which must precede progress, must be made against the lethargic opposition of many who lack the spacious-mindedness necessary to grasp the problems of this war-altered world. The use of social forces for the physical betterment of man is difficult but necessary. Change there must be. Shall that change be radically disruptive or conservatively constructive?

Why is the phrase "the socialization of medicine" to the average medical man "like a red flag to the attorney general"? Is the socialization of medicine something new and unheard of to date? Is it something terrible that is going to befall us over night? Are we being led astray by fools captured by catchwords?

On the contrary, the socialization of medicine began with the earliest clinic, hospital or health department. Those who object to the theory of "socialization" do not usually oppose its practice. Consider such universally accepted examples as the following:

1. The development of a medical co-operative group method of treating disease—namely the hospital public ward.

2. The establishment of diagnostic and treatment facilities for large social groups, medical equipment and personnel being employed in common—namely, the clinic or dispensary, and all out-patient service.

3. Community health organization, official and private health bodies—representing the interests of the whole community as to disease prevention and control.

4. The employment of medical service for large population groups in society, as for school children, industrial workers, etc.

5. The development of group practice and specialty clinics, rendering available diagnostic and treatment facilities otherwise beyond the reach of the average physician and patient as well.

6. The fostering of routine medical examination and advisory work for large unorganized groups of individuals by the employment of organized medical forces, such as through the Life Extension Institute, and other agencies.

7. Finally, and perhaps most significant thus far, the employment of organized medical forces, in the development of general social machinery for the prevention and treatment of disease and disability as in accident and sickness insurance, imperfect as is our social organization in these fields at present, inadequate and unsatisfactory as has been the practical provision on the medical side.

These are the more or less conscious expressions of the present socialization of medicine. But is it not a fact that the private practice of medicine, in spirit and motive, is the most socialized instrument for physical betterment at work in the world today? The physician has his social spirit of service. He succeeds to the extent to which, through his unorganized individual efforts, he is bettering the lives of others. The defects of private medicine are not of fundamentals, but of method and organization.

Physicians have usually heartily supported all the above attempts at the so-

cial use of medicine. Yet we are constantly told that the physicians are opposed to the socialization of medicine.

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Physicians have usually heartily supported all the above attempts at the social use of medicine. Yet we are constantly told that the physicians are opposed to the socialization of medicine. Is it true? Certainly they do not like the term. Certainly they do not favor health insurance. But that is only one aspect, and the causes of opposition are obvious.

It is impossible to imagine why the physicians should approve the "status quo." Surely they are not in love with present conditions. The doctor accepts his lot with superior good will, but he works in the face of almost intolerable obstacles. A few of the disagreeable elements which, to a great degree unnecessarily, burden the life of the general practitioner are tallied up in the panel on the following page.

This is the practice of medicine, except for the favored few. Does it mean an easy existence for the physician? Does it mean the best service for the public? Yet in spite of these handicaps, we find in every community many medical men performing a noble service under a tremendous burden. There is scarcely an American community without its old family physician, interested in all good movements, trusted with leadership in all vital matters, struggling along in poverty, concerned only with his obligations and opportunities for service and self-sacrifice. His example brings to us a realization that these limitations upon practical service, while they represent just grievances, are equally significant in reflecting the glories of the profession.

The Doctor's Rewards—and Deserts.

1. More than any other occupational group the physicians are called upon to meet the demands of long hours, excessive "over time," night work, etc.—all, with relatively few exceptions, for a "white wing's" pay.

2. Not only is he under-paid for the services he performs, but the doctor's collections are frequently poor. It is considered poor etiquette to be too "business-like" in insisting upon payment and he faces the subtle public sentiment that rather discredits the man in medicine who "makes money"—a condition that prevails in no other calling.

3. He is required to maintain the morale of the soldier—takes the risk of the soldier—yet there is for him no remuneration while in training, no promotion, no pension, no discharge—a life with the severest duties and with no rights.

4. From him is demanded more volunteer service, without compensation, or recognition, than is the case in any other profession.

5. While he may have been an excellent student in school, an enthusiast for research, a man who had genuine scientific interests, the economic pressure to which he is subjected in practice will not only give him no chance for continued study, but will often dull his sense of scientific values and his enthusiasm for worthy endeavor.

6. If a general practitioner striving to develop a specialty, he has to fight for every minute of time to study. Then,

he must face that part of the public that sneers at specialists, and at the same time expects to find for a dollar office call all the specialties combined in one man a surgeon, an ophthalmologist, a pediatrician, a tuberculosis expert, and what not, never realizing that "it can't be did."

7. Economic pressure, again, will probably prevent the devotion of his time and interest to the work for which he is best fitted. How many potentially excellent neurologists or research men are wasting their time on routine life insurance examinations, to eke out a living?

8. If he has devoted years to thorough training, he is still likely in some communities to find himself in competition with a graduate of a correspondence school or a night diploma mill.

9. He may start out with high ideals of a service, with the desire to keep accurate records, anxious to meet his full obligations to his patients. How often does one see these early ideals reced with the hard-earned knowledge into the dim past, in the face of competitive economic pressure for a living? How many men would like to keep accurate case records if time allowed? How many would like to act according to their conscience and perhaps call more frequently upon patients, if this did not have the appearance of selling themselves and forcing their services? How many would like to follow up their cases, preventing possible serious sequelae, if time and custom permitted?

If this is the practice of medicine, what is its theory? Does the theory more nearly coincide with our ideals of what medicine should be? The theory of medicine has developed in three stages: first, the physician existed as an individual in the community with the sole object of making sick people well; second, there was added the conception that he might also keep people well—a social conception, requiring organization, and hence our health departments and allied social devices; third, and finally, there is being added a new idea, namely, that the physician should not only cure sickness and prevent sickness, but he should also create health.

As the theory has developed, sociali-

zation has proceeded to attempt to put it into practice. How well it has succeeded must be more or less evident from what has gone before. In theory the physician exists to prevent sickness and to create health. In theory he is free to act as the noblest servant of mankind. In practice he is earning a precarious and meagre living in a competitive business. Is there needed a new coat for his wife? He must pray for an epidemic. In other words, his income depends on sickness and not on health. A community educated to the social use of medical machinery would reward its physicians for an increase in health and a decrease in sickness. The doctor is now penalized for this very

combination.

Yet, in the face of these situations worthy of Alice in Wonderland, the physician continues his glorious, if somewhat blind service to duty and humanity. Strangest of all, in spite of these discouragements, the majority of physicians seem willing to fight for the privilege of economic serfdom. They apparently oppose developments along the very lines they have already approved. There must be a misunderstanding. What is it?

DONAL B. ARMSTRON, M. D.
EUNICE B. ARMSTRONG.

X-Ray and Laboratory

Robert H. Lafferty, M. D., Dept. Editor.

In cases of malignant growths it is all important to make an examination of the patient for metastasis. The roentgen examination offers probably the only means of determining the extent of this metastasis and no case of malignant trouble where there is the least suspicion of metastasis should be operated on without first giving the patient the advantage of this examination.

Carman and Moore in 1915 presented a paper with the following conclusions:

1. Pulmonary metastatic malignancy is not an uncommon condition and may occur regardless of the seat of primary focus.

2. Pulmonary metastasis bears no relationship to the extent or duration of the primary focus.

3. The clinical picture in a majority of these cases is very indefinite, neither the subjective nor the objective manifestations being characteristic of the condition.

4. Metastatic pulmonary malignancy is a definite roentgenographic entity, appearing in the roentgenogram as clear cut circumscribed areas of increased density.

5. In many instances the diagnosis can be established only by the roentgenogram. By routine roentgenographic examination of the thorax many patients suffering from malignancy will be saved from useless and unwarranted surgery.

Pfahler in 1916 presented a paper

bearing on the same subject with the following summary:

1. Metastatic carcinoma involving bone is much more frequent than is generally recognized, and probably in the advanced stages occurs in nearly twenty per cent of the cases.

2. The metastasis to the spinal column occurs in the order of frequency from mammary carcinoma in women, or prostatic carcinoma in men, carcinomata of the stomach and of the thyroid.

3. Rheumatic pains occurring in the presence of malignant disease should always suggest metastatic carcinoma in the spinal column or other bones and demand a thorough roentgen study.

4. The prognosis of metastatic carcinoma of the spinal column or other bones is very bad, but not absolutely hopeless, and there may still be considerable prolongation of life with hope and comfort even after the disease has become very extensive.

At the American Roentgen Ray Society a year ago Moore presented a paper bearing on the same subject, analyzing the cases recently observed at the Mayo Clinic, referring especially to the bone metastasis.

He calls attention to the two types of bone metastasis, the osteoplastic with absorption and destruction causing an extreme porosis of the osseous tissue; and osteoplastic, which is characterized also by the lacunar absorption but also a thickening of the bone due to a collection of the malignant cells and a secondary calcification around the malignant process. The osteoplastic shows an increase in the bony density and a chalky appearance. There may or may not be any periosteal thickening. Most observers agree that most frequently the osteoplastic type is seen in carcinoma of the prostate and the osteoclastic in breast tumors. Moore finds the primary lesion in the breast in 55 per cent, the prostate in 18½ per cent, kidney in 10 per cent and the thyroid in 3 per cent. The location of the metastasis is: Spine 34 per cent, pelvis 18½ per cent, femur 14 per cent.

The following summary is given:

1. Bone metastases may result from malignancy of almost any organ, but the most common foci are the breast and prostate.

2. Bone metastases are uncommon in malignancy of the thyroid.

3. Bone and pulmonary metastases are rarely associated.

4. The most common symptom complained of is pain, which is fairly typical and should be regarded as an indication for a roentgen examination.

5. The roentgen appearance is characteristic, and a thorough examination should be made by the X-ray in all cases in which there is any suspicion of bone metastasis.

Hospitals and Sanatoriums

John Q. Myers, M. D., Department Editor

The Process of Hospital Standardization.

The minimum standard of the College in its hospital program is now familiar to a majority of the physicians and surgeons of the continent and it is well known to practically every hospital superintendent. Further, doctors and superintendents know that the minimum standard is their own expression as to the first essentials in the right care of patients. The time of discussion has gone by and the time of action has arrived. Some details of this action, or of the process of standardization, may be of interest.

In the United States and Canada there are 1667 general hospitals for the care of acute diseases. Of these 671 have a capacity of 100 beds or more and 996 with 50 to 100 beds.

The program of the College for 1920 is, through its staff of visitors, to explain in detail to superintendents, staffs, and trustees of these hospitals what the minimum standard is, what the problems are which arise in connection with it, and what the practical solutions to these problems are as determined by experience among hospitals. Further, the visitors are to collect exact information as to the extent to which each hospital fulfills the standard. On the face of the visitor's record card he reports concerning staff meetings, case records, and laboratory service; on the reverse side of the card, concerning the number of deaths, autopsies, facilities for pathological work. General notes are also included.

At the present time there are seven visitors of the College—all men with

medical education—at work in the field. One is now in Louisiana, one in South Carolina, one in New Jersey, another in Michigan, another in Ohio, still another in Oklahoma, and two in Canada. The number of field workers is to be increased. The work of the visitor is to be helpful and constructive. With this policy thoroughly understood, he starts on an itinerary planned some two months in advance. The hospitals are notified in advance of each visit. On visiting a hospital the man in the field mails a daily report to the central office. With this daily report are enclosed cards with the information gathered at each of the hospitals. At the end of each week the visitor also sends to the College a letter which covers in minute detail the results of his week's effort. He reports especially suggestions of value which he has received, and he gives any information which in his opinion will make for the betterment of the work.

Busy superintendents, busy doctors, and busy trustees are cordial in their co-operation. As one doctor put the matter: "It is wise that we lead now in a program for the better care of patients rather than to be forced later by the public to follow in such a program."

The following extract taken from the instructions issued to each hospital visitor tells its own story:

"The visitor is to collect facts and he is to collect facts only with the good will and approval of the respective hospitals. His mission is business. He is not a detective, an unbidden critic, nor a social caller. He is not to make comparisons of one institution with another. He is to be helpful and constructive. The success of his visit will depend upon his sincerity. He must believe in his work. The visitor who is unwelcome has in all probability not wisely handled the situation."

A correspondent of the N. A. R. S., writing of the conference of anaesthetists held in connection with the Fifth Annual Convention of the Catholic Hospital Association at St. Paul, says it was decided that ether with nitrous oxid-oxygen is the safest anaesthetic. Chloroform was in disfavor because of the large number of casualties from anaesthesia said to result from its use.

Nurses Corner

Edith M. Redwine, R. N., Dept. Editor

"The common problem, yours, mine, everyone's,
Is not to fancy what were fair in life,
Provided it could be,—but finding first
What may be, then find how to make it
fair
Up to our means."

ROBERT BROWNING.

"The outlook for the private duty nurse is greater than ever before," says Winifred Boston, Cedar Rapids, Iowa, in writing for the American Journal of Nursing. "For she can help every other branch of the nursing profession by her influence. The public health nurse alone is not responsible for the health of the public; she must lead but the other two divisions of the profession must stand on either side doing their share. The private duty nurse has a big responsibility in the campaign for better health."

"Many people do not know what is being done, or why it is done, that all nurses are working for a strong and healthy race. People do not know how much the hospitals are doing and what good the school public health nurses have accomplished.

In all our nursing journals at the State meetings, etc., public health nursing seems to be the topic of the day, and makes the private duty nurse wonder if she is a back number, getting rusty or in a rut.

But no, the private duty nurses are just as essential as ever, and their work is as highly important as any. However there is also great need of these other workers in the newer branches, and like anything new, it must be well advertised to gain the attention of the public.

The city, State, and nation as a whole should be interested in providing the highest and best training for those who are to engage in the pursuits by which human life and human health are conserved.

The private duty nurse should interest the people with whom she comes in contact in these things. The problem of the adjustment of the nursing profession to the social need of the less af-

fluent classes of society remains; its solution has not been found in the proposal of less efficiently trained women for family service. It has long been a question in the nursing profession how the middle class could have good care at less expense, and we private duty nurses feel that the public health nurse is answering a long felt need."

"For many centuries nursing was but a common duty of domestic life, and was often performed interchangeably among the households of a community, with experience the only teacher. The nursing profession is moving forward but under heavy incumbrances, and the spirit of commercialism which has infected so much of modern life, I admit with shame, has prevailed too often in the porfession of nursing.

But don't let the ideal nurse of the past fade. We must keep up the spirit of helpfulness and not hold back part of the price of genuine service. We look upon our work as a means of service as well as means of livelihood. The private duty nurse must be public spirited and keep up with the times; she must be well posted on many subjects and must have a broad outlook—it is a duty we owe ourselves, as well as a benefit to those we care for.

To win herself a fitting place as the handmaid of modern and preventive medicine, to hold for herself her traditional place in the ministry of human pain, the nurse of today can neither be too womanly, or too well trained, or too good!"

Miss Ethel Mackenzie, of Asheville, one of the two Southern nurses selected by the Red Cross for relief work in Poland is now stationed in Warsaw caring for wounded soldiers from the front.

According to news received by friends of Miss Mackenzie she was recently sent to the north of Poland right in the line of advancing Bolsheviks to rescue 740 children located in an orphanage there, and bring them to a place of safety somewhere in the south of Poland, which she did successfully.

Miss Mackenzie's many friends in North Carolina will learn with interest of her bravery and devotion to duty in her service to the Poles.

Publications Received

"EXOPHTHALMIC GOITER AND ITS NONSURGICAL TREATMENT,"

by Israel Bram, M.D., Instructor in Clinical Medicine, Jefferson Medical College, Philadelphia, Etc. 440 pages. C. V. Mosby Co., St. Louis. Price \$5.50.

In the introduction, the author reports a case which came to him several years ago, showing the complete and classical picture of a far advanced case of Exophthalmic Goiter that had been the rounds of physicians, surgeons and hospitals. A picture that in its helpless appeal for help touches any man and makes him in the face of the unfavorable situation try for, the sympathy he has, to "do something." In this case the author outlined for the patient a regime of dietetic, hygienic and medicinal treatment, ushered him out of his office and tried to forget the incident. In a week he returned and seemingly was "no worse." In another week possibly there was a very slight improvement. Within one year the conditions were so completely corrected that the man was discharged as cured.

This case then proved to be the starting point from which a series of complete nonoperative cures of Graves disease resulted. Also was the beginning of a series of papers reporting these cases and definite, systematic and intense study of the problem.

This volume is the compilation of these papers and rearrangement in connected manner giving the many diagnostic tests for early diagnosis and in clear detail outlining the author's judgment as to the effective nonsurgical treatment.

"EATING TO LIVE LONG," by William Henry Porter, M.D., and with Edwin F. Bowers, M.D., as Collaborator. 224 pages. The Reilly & Lee Co., Chicago.

Dr. William H. Porter was Dean of the Post Graduate Hospital for twenty-seven years and Professor of Pathology and Internal Medicine, and certainly is peculiarly qualified to write on the subject of this work.

Although his style and some of his

statements might be classed as radical and may upset some time-honored and "taken for granted" ideas, yet in "Eating to Live Long" there will be found a mass of tremendously important information valuable alike to physician and layman.

The headings of some of the chapters are:

"The Why and How of Food."
 "Turning Food Into Fuel and Repair Stuff."
 "Getting Rid of the Ash and Cinders."
 "Mineral Salts and Vitamines."
 "Food Fads and Foolishness."
 "The Crimes of Cooks."
 "The Ideal Diet."
 "The Demented Diet of a Business Woman."

"What Is the True Status of Alcohol?"

"Curing Disease by Diet." Etc., etc.

"Man is an organism built around a food tube." "The most important determining factor in racial development is the character of food upon which any people has lived."

"But anybody who is still alive, and who thinks more of his health than he does of tickling his palate with ticklesome foods, can be materially improved and oftentimes entirely cured, by following this reasonable and rational method of diet."

Experience in thousands of cases proves that it "works." Try it for yourself and see." This last sentence is the keynote of this book. After clearly pointing out the dietetic crimes and as clearly indicating the better way, the author in all confidence puts the question up to the reader to be convinced by actual personal trial that it does "work."

"THE FUNDAMENTALS OF HUMAN ANATOMY,"

Including Its Borderland Districts—From the Viewpoint of a Practitioner. By Marsh Pitman, A.B., M.D., Professor of Anatomy in the Dental Department of Washington University, St. Louis, Mo. 360 pages with 100 illustrations. C. V. Mosby Co., St. Louis, Mo. Price \$4.00.
 "One point of view as to the teaching and learning of anatomy.

The avowed purpose of the author in presenting this work is that emphasis may be given to the importance and practical value of anatomy as an aid to the practitioner in any or all of the subdivisions of medicine. It is fundamen-

tally a useful and ever needed ready aid to the busy doctor in helping him to solve the problems coming up in his daily work.

"Teaching more by not attempting to teach too much."

"If this volume tends in any degree, directly or indirectly to bring the teacher and student of anatomy into closer sympathy, it will have fulfilled its mission."

Logic has been introduced in so far as possible to take the place of memorizing.

We do not hesitate to recommend it as being really worth while.

"AN EPITOME OF HYDROTHERAPY," for Physicians, Architects and Nurses. By Simon Baruch, M.D., LL.D., Consulting Physician to Knickerbocker and Montefiori Hospitals, Consulting Hydrotherapeutist to Bellevue Hospital, New York City, formerly Professor of Hydrotherapy, College of Physicians and Surgeons, Columbia University. 12mo of 205 pages, illustrated, Philadelphia and London: 1920. W. B. Saunders Company. Cloth, \$2.00 net.

"That physicians do not obtain the best results from Hydrotherapy has so often come to the attention of the author that he has undertaken in this volume to direct attention to some of the causes of failure and the facile methods of removing them, not only in chronic, but acute and subacute ailments."

"The author hopes to achieve the conviction of his colleagues that water is an important integral part of our *Materia Medica*, requiring the same careful preparation, exact dosage, and precise administration as do drugs."

The author assumes the premise that the cutaneous nerve endings stand guard as it were, over most of the functions of the human body. The irritation of these by heat and cold conveys an impression to the vasomotor, respiratory and cardiac centers and to the muscles, in order to arouse in them by reflex action such a degree of innervation as may be required to ward off any damaging influence that may approach from without. This being the true physiologic basis of hydro therapy it must adapt its attacks by heat and cold to the indications in each individual case. These indications are very clearly shown in this work.

News Items

CUMBERLAND COUNTY.

The regular society meetings which have been suspended during the hot weather will be resumed this month.

The fee bill passed at the April 20 meeting calling for an increase of 50 per cent over former prevailing fees has operated very satisfactorily since that date.

I am in hearty accord with your effort to get the North Carolina doctors closer together and with a more intimate feeling of brotherhood and shall be very glad to report such news items as may be of interest.

H. L. Cook, Sec'y-Treas.,
Cumberland Co. Med. Soc.

GUILFORD COUNTY.

The regular meeting of the Guilford county society was held in the county courthouse at 8 p. m. Thursdaay, September 2nd.

Papers were read by doctors J. Par-ran Jarboe, Greensboro; J. J. Mann, High Point; D. A. Stanton, High Point, and W. P. Knight, Greensboro.

Dr. W. F. Cole has recently returned to Greensboro, after spending six months as house surgeon in the Children's Hospital, Boston, Mass. Having specialized in orthopedic surgery, Dr. Cole expects to confine his practice to this specialty.

Dr. J. A. Siske, recently discharged from the U. S. Army, has located in Pleasant Garden, N. C.

At the meeting of August 5th. The Guilford County Medical Society adopted the following scale of fees as a minimum:

Day visits	-----	\$ 2.50 to \$ 3.00
Night visits (10 to 7)	---	\$ 5.00
Office consultation or examination	-----	\$ 2.00 to \$ 5.00
Telephone consultation	-----	\$ 1.00
Obstetrical cases including visit	-----	\$25.00. to \$50.00

This fee bill is for Greensboro and vicinity, High Point having recently adopted one.

DR. F. J. PATE,
Sec.-Treas.

BUNCOMBE COUNTY.

I wish to express to you my approval of your effort to have monthly letters from the different Societies of the State. I believe it to be a move in the right direction.

During the summer months the activities of the local Society are considerably curtailed and at the present time there is nothing of interest to report.

We have several matters to come up at the next meeting to be held September 6th. * * * * For that reason it is not yet ready for publication in your Journal.

I shall take pleasure in keeping you informed of any news which I think might be of interest to your paper.

Yours very truly,

W. P. HERBERT,

Secretary Buncombe Co. Med. So.

ROBESON COUNTY.

The Robeson County Medical Society held its regular meeting in Lumberton Wednesday, September 8, at 10 a. m.

Dr. N. A. Thompson is building twenty additional rooms to his hospital. This will give him a hospital with a capacity of forty beds.

James A. Martin, M. D.,
Secretary-Treasurer.

WAYNE COUNTY.

We are very sorry to say the Wayne County Society has not held a meeting in several months.

I congratulate you on your activity and effort to get the profession of North Carolina more intimately acquainted and shall be very glad to forward news items of interest.

C. F. Strosnider, M. D.,
Secretary-Treasurer.

Mecklenburg County held its regular semi-monthly meeting September 7 with its usual good attendance (42 members present). A number of interesting cases were reported and discussed. The subject on the program for the evening was "acidosis" which was ably discussed by a number of doctors.

A large party of Mecklenburg doctors are planning and preparing to attend the Montreal meeting of the Clinical Congress of the American College of Surgeons October 11-15.

Dr. Clyde K. Hasely has joined the Crowell Urological Clinic and will be associated with Dr. Elliott in the department of Dermatology.

Dr. Hasely comes from the University of Michigan where he was associated with Dr. Wyle and was for three years instructor of Dermatology in the University.

The profession not only of Charlotte but of North Carolina and adjoining states are glad to welcome Dr. Hasely and the Journal speaks for him abundant success.

Dr. A. A. Barron of Charlotte left September 1 for one month of special study in Philadelphia.

Miss Nancy Jenkins, superintendent for three years at Tranquil Park Sanitarium, will assume charge as superintendent of the Winston-Salem hospital October 1.

EIGHTH DISTRICT (N. C.) DOCTORS MEET AT WENTWORTH— BARBECUE.

The meeting was held in the county court house and all present agreed it was a most valuable and also a most pleasant day. Refreshments that refreshed were served in abundance—cold drinks, cigars and cigarettes were passed around to all who would indulge—and luscious watermelons were the menu's concluding item. Dr. John B. Ray, of Leaksville, presided and Dr. J. T. Taylor, of Madison, was secretary.

The society selected Ashboro as the next meeting place and elected Dr. Thos I. Fox, of Franklinton, as president and Dr. C. A. Hayworth, of Cole-ridge, as secretary.

The papers were freely discussed and the spirit of the entire meeting was that of genuine good will and practical helpfulness.

Program.

"Otitis Media"—Dr. T. W. Davis, Winston-Salem.

"Fundamental Principles of Diagnosis of Head Trouble"—Dr. W. Peerry Reeves, Greensboro.

"The Cancer Problem"—Dr. J. W. Long, Greensboro.

"Syphilis from the Standpoint of Internal Medicine"—Dr. Frederick M. Haynes, Winston-Salem, read by Dr. Everett Lockett, Winston-Salem.

"Various Phases of Radium Therapy"—Dr. W. S. Budd, Richmond, Va.

"Ricketts"—Dr. W. F. Cole, Greensboro.

"Mania"—Dr. James K. Hall, Richmond, Va.

At the conclusion of the program the society adjourned to the home of Mr. J. Newt. McCollum, one mile out, where the wonderfully well prepared Brunswick stew and well cooked barbecue, brought to life even dead appetites and made this dignified, sedate assembly of "life savers" feel and act like a bunch of happy schoolboys on a vacation.

The Seventh District Medical Society will hold its annual meeting October 4-5 at Lincolnton. The program promises a most inspiring meeting.

The American Hospital Association meets in Montreal October 4-8. A recent survey of North Carolina shows three hospitals in the state with a first class rating which would indicate that all other North Carolina hospitals would do well to send a representative to the Montreal meeting for much needed information, enthusiasm and inspiration.

The Wadesboro Hospital is building an annex which will give them very much needed additional facilities.

Dr. Henry Boyden Rowe wishes to announce to the medical profession that he will limit his practice to the eye, ear, nose and throat beginning August 1, 1920, Mt. Airy, N. C.

Dr. Bulkley begs to announce that he has retired from the active practice of Dermatology, and will devote his attention solely to consultation practice in the same and to the treatment of cancer. Dr. Bulkley has turned over his dermatological patients with their records to Dr. A. Schuyler Clark, 10 East 61st street. Dr. Clark was formerly associated with Dr. Bulkley in private practice for a period of nearly five years, and has long been connected with the New York skin and cancer hospital.

Dr. J. H. Rozzelle, Salisbury, N. C., died at the Presbyterian Hospital, Charlotte, September 11.

Dr. Rozzelle made his own diagnosis of sarcoma of caecum and upon operation this was proven correct and with quite extensive involvement.

The body was returned to Salisbury for interment Sunday afternoon, September 12.

The property adjoining the Charlotte Sanatorium has been purchased by the Crowell Urological Clinic for the purpose of erecting on the site a thoroughly modern hospital and clinic building of 100 or more rooms.

The first floor will be used by the Crowell Urological Clinic for offices, laboratories, etc., and the second and third floors to be connected with the Sanatorium by corridors will be used for general hospital beds.

"Diagnostic Clinic" opened at Raleigh, N. C., for the purpose of group practice with diagnosis the main objective.

Dr. Harold Glascock, Surgeon.

Dr. Amzi Ellington, Internist.

Dr. Ivan Procter, Gynecologist and Obstetrician.

X-Ray-Laboratory and Office Assistants.

The offices of the clinic are modernly equipped for physical, X-ray, cystoscopic and laboratory diagnosis.

The Mary Elizabeth Hospital is operated in connection with the clinic.

Dr. Russell S. Beam, Lumberton, N. C., sailed August 15 from New York for Southampton to be gone about three months visiting the London clinics.

Dr. Beam does eye, ear, nose and throat work and it is the clinics in this department he wishes to become more familiar with in England. He expects to return to Lumberton in November.

Clinical Congress of American College of Surgeons will hold 10th annual session October 11-15, 1920, Montreal, Canada.

The Southern Medical Association will meet at Louisville, Ky., November 15-18, 1920,—one week later than the date originally set.

Memorial to be Dedicated by Jefferson Medical College.

As a tribute to those graduates who gave their lives in the service of their country during the late war, the Alumni Association of Jefferson Medical College has planned to dedicate a memorial,

which will be in the form of a large bronze tablet, 5 feet high by 4 feet wide. The tablet will be decorated and engraved with the names of the men who surrendered their lives in the service, and will be placed in the main entrance to the college at Tenth and Walnut Streets. Dedicatory ceremonies will be held in the college building on Thursday, October 7, 7 P. M. Jefferson Medical College was represented in the war by 1,147 graduates, twenty-five of whom gave up their lives.

Miscellaneous

THE PHYSICIAN'S OFFICE.

The people have money and they are spending it. But, like the woman who bought the pair of silk stockings, they want something to show for it. With incomes anywhere from \$8 to \$15 a day, the bricklayer who buys a flivver, the cap maker who has a fur coat, the tailor with season tickets for the opera, are able to pay good fees to their physicians. But they want the best, and the physician should equip himself to give it to them. The physician who plods along in shabby quarters, dependent wholly on his five unaided senses for diagnostic ability, his only reference works some dilapidated textbooks of a previous decade, will not suit the taste of the new type of wage earner.—*Jour. A. M. A.*, Aug. 21, 1920.

ORGANIZED VS. INDIVIDUAL EFFORT IN RESEARCH.

In his presidential address delivered at the Cambridge meeting of the British Medical Association, Sir Clifford Allbutt pointed out the complexity of disease and the great advantage that has accrued to research by approaching the problems from a comparative standpoint. To proceed in this way, however, requires a breadth of intellect and a wealth of observation and analysis that are ordinarily beyond the possibilities of the individual. Hence Sir Clifford argues for the organization of investigation on a larger scale commensurate with the needs of such a comparative survey, in which many intellectual forces may combine to work toward common ends. At the present time, says Allbutt, "no one stirs, save to gy-

rate each in his own little circle. There is no integration, no organization of research, no cross light from school to school, no mutual enlightenment among investigators, no big outlook." "Diseases," he continues, "are not 'entities,' nor even recurrent phases of independent events, but partial aspects of a universal series. The young graduates we have, many of them of great capacity; but every day we are losing them because they are not taken up at once into scientific teams; so they slacken, or drift into some other means of livelihood, and things muddle on as before. How blind we are!"

PIE AND DIGESTION.

There is a widely current slang expression which bewails the depressing circumstance that "somebody is always taking the joy out of life." Many Americans have become wedded early to an outspoken liking for pie, that typical national pastry. The predilection for this article of diet seems to grow with the years. Sooner or later, however, the aforesaid somebody, who is more than likely to be a member of the medical profession is certain to issue a note of warning against the alimentary dangers that lurk in pie. Cake, the distant pastry relative, is somewhat less likely to form the subject of the objections from the physiologic critic, while puddings usually belong to the immunes, or at least receive tolerant consideration. The proof of the pudding—and why not also of the pie—is the eating. Accordingly, a number of gastro-enterologists at the Jefferson Medical College, Philadelphia, have come to the defense of pie by actually determining the gastric response to it and analogous foods in the healthy human stomach. Direct comparisons of a variety of pies, cakes and puddings representative of American culinary art, on the same persons, indicated that pies "were handled more readily than cakes, and puddings somewhat more readily than either." For those who can think best in terms of statistics, it may be stated that the average gastric evacuation time of puddings was two hours and eighteen minutes, against two hours and twenty-seven minutes for pies; whereas cakes followed in the wake with an average record of three hours and two minutes. Averaging the highest total acidities, values were ob-

tained for puddings of 92, for pies of 90, and for cakes of 90. Some of these values are not widely divergent from the classic data obtained on Alexis St. Martin, whose stomach permitted Beaumont to make his pioneer investigations in gastric digestion. There is no occasion to report here the insignificant distinctions between custard pie and lemon meringue, for example, in their gastric behavior; but it must be admitted that mince pie, so often regarded as an arch offender of the digestive tract, requires a rather long time (from two and three quarters to three and one quarter hours) to leave the stomach. The addition of ice cream to a piece of pie—a unique American combination—does not increase the burden of the stomach to any extent, and the conventional apple pie and cheese likewise give a conservatively good report. To a few persons it be a consolation to know that angel's food cake remained distinctly longer in the stomach than did devil's food cake. Of course, gastric evacuation is not the sole, complete test of the dietary worth of a food.—*Jour. A. M. A.*, Aug. 21, 1920.

NEW YORK STATE SPENDS \$225,000 FOR RADIUM.

(From the American Society for the Control of Cancer, 25 West 45th Street, New York City.)

Statement made by Dr. Harvey R. Gaylord, one of the Directors of this Society and Director of the State Institute for the Study of Malignant Disease, Buffalo, New York.

"The people of the State of New York will want to receive a statement on the stewardship of the purchase of 2¼ grams of radium for which \$225,000 was appropriated by the State, and announcement of which was made by Governor Smith a few days ago.

"I am very glad to take this opportunity both in the name of the Institute for the Study of Malignant Disease, the State and the American Society for the Control of Cancer which supported this purchase to say these words:

"The experiment in State ownership of a therapeutic agent, as exemplified in the purchase of this radium for social utility will have a far reaching effect. This is a development of state medicine to which no one can object and Governor Smith deserves the thanks of the State for what he did."

"Any citizen of the United States,"

said Doctor Gaylord, "may avail himself gratuitously after October 15th of treatment with the 2¼ grams value at \$225,000 recently purchased by New York State and the first gram of which was delivered by the Radio Chemical Corporation of New York last week. Preference, however, will be given to citizens of New York State.

"The first gram is now in the vaults of the Institute at Buffalo and the appliances necessary for its use in the treatment of cancer are now in course of construction. The engagement of a competent physicist to work with this radium is also announced. The radium we are using is an American product, mined in Colorado, brought 2,900 miles across the continent in the form of 125 tons of carnotite ore to the extraction plant at Orange, N. J., where it was reduced by fractional crystallization to its present state.

"The first purchase of radium by any State," the Doctor continued, "marks a step in the health activities of an American Commonwealth. Up to the present we have had no therapeutic agents, so expensive that they could not be afforded by the average practitioner. In the case of radium that condition arises. The unit for efficient use costs not less than \$12,000 and represents 100 milligrams. A gram is worth \$120,000. The greater the quantity in an installation the more efficient it is, and the less it costs per treatment. New York State has met this condition by purchasing an amount available for all its citizens.

"The value of radium has already arrived at a stage where States, and if necessary the government, should make radium available for cancer treatment, gratuitously and beyond the realm of financial limitations. The advent of radium as a therapeutic measure is the most important forward step in the treatment of cancer.

"It is not surprising that when radium first made its appearance over-optimistic claims for its use and hope of its utility should have occurred. But that time is now past. Radium has been made available in smaller and larger amounts to all of the important centers of cancer research in this country, with the result that not alone has new knowledge of this agent been greatly advanced but the technique of its use as

well as its limitations have been more definitely defined. The last six years have marked steady progress in its application, and means of more scientifically and more efficaciously employing it have been developed.

"The State Institute as a result of carefully controlled scientific experiment in its hospital felt that the time had come when the State of New York should logically provide an adequate amount of radium for the Institute on the basis that its value is so definitely demonstrated that it should be made available without cost to the citizens of the State and that the opportunities for research should now be extended along practical lines. The State Institute has had since 1919 an amount of radium sufficient for scientific study. Private philanthropy has given the Memorial Hospital in New York City a large amount of radium for scientific investigation and practical application for the past four years. The Cancer Research Commission of Harvard University has also had an adequate working supply. The advances made in these and other quarters has steadily strengthened the confidence in the use of this agent and all of these centers are now seeking means to increase their supply.

"The State of New York which in 1898 took the lead by founding the first modern State cancer research institute in this country should properly be made the first State to appropriate the necessary funds for the purchase of a sufficient amount of radium for the use of its citizens having available for this purpose a center of cancer knowledge and fully equipped scientific research laboratories where its use can be made immediately effective, and from which scientific progress can be confidently anticipated.

"The usefulness of radium in the treatment of neoplasms is still in its infancy, but there are already certain kinds of cancer in which its use offers advantages and the results obtained are an improvement upon any means we have heretofore possessed. It must, however, be remembered that our main reliance in the treatment of cancer is surgery but radium in combination with surgery, frequently greatly improves the prospective cure.

"The scientific development of the last two years in the use of radium,

largely through the work of Professor William Duane of Harvard University, made available a means of using radium which has immensely strengthened its usefulness. This method is the use of the emanation of radium in place of the application of radium itself. This method is only available when you have at least one gram.

"Cancer today is one of the most important diseases in the United States. It increases 25 percent every ten years. In the United States 90,000 deaths occur yearly from it, being of equal importance to tuberculosis. In New York State about 8,000 deaths occur yearly.

"The purchase of the radium has other significance than merely its use for the treatment of cancer. It gives an opportunity for research and its use under scientific conditions is sure to increase our knowledge of cancer. While surgery still remains our main reliance in the fight against cancer we can only hope greatly to improve the results of surgery by bringing the patient to surgical treatment at the earliest possible moment. This can only be accomplished by the diffusion of knowledge among the laity of the first beginnings of cancer. It is with such work as this, that the Society for the Control of Cancer has particularly charged itself. It is felt by the Society that the advent of an alternative will overcome the reluctance of many cases to present themselves to their physicians. The Society represents 900 physicians and laymen and looks with great interest at the purchase and congratulates New York upon the step it has taken.

"The purchase of this radium by an American Commonwealth from an American Company which has mined its ore in the State of Colorado, will bring still further to the fore the pre-eminence of America in the treatment of cancer. Buffalo will become a radium center. While Europe, through Madam, Curie, first made the precious element known to the world, the United States has developed both the ore, its extraction and its use as a therapeutic agent. It is today in the forefront of treatment of cancer. This purchase may have a tremendous effect upon further progress in this direction."

Fresh air and sunshine are better for your health than bottled tonics bought at the corner drug stores.

"Summer Fag"

heat depression—with its impairment of the appetite, digestive troubles, bowel disturbances, diarrheal disorders, nervous exhaustion, cardiac embarrassment and deranged functions—generally,—can be effectively relieved, and often prevented, by the use of

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Two to four teaspoonfuls in iced water or poured over cracked ice will not only greatly refresh invalid or convalescent patients to a gratifying degree, but its continued use will substantially increase the vital resistance. The effect on the appetite, digestion and assimilation, and prompt relief of nervous exhaustion, tell why so many physicians look on Gray's Glycerine Tonic Comp. as the ideal hot weather tonic.

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NOTICE Sherman's Vaccines



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The vial is amply strong which prevents breakage so frequent with shell vials.

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Whenever the lactic treatment is indicated ---whether it be externally or internally---this culture of *Bacillus Bulgaricus* may be used with assurance of results.

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Yonkers, New York

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Quotations from Doctors: No. 6

"When the cervix is red, eroded and indurated, when ulcerations are present, accompanied with thick, tenacious discharge; in acute and chronic endometritis; in ovarian, uterine and vaginal inflammations, the liberal use of



produces immediate results.

"In treating the cervix and vagina, I use a lamb's wool tampon, with hot Antiphlogistine. This is packed well against the affected parts and held in place by gauze. Portion of gauze is allowed to protrude, as well as the string attached to tampon; and patients given instructions to remove it after allowing it to remain from twelve to fourteen hours."

R. A. V., M. D.,
ST. LOUIS, MO.

THE DENVER CHEMICAL M'F'G. COMPANY
NEW YORK

CORRECTION OF CONGENITAL CLUBFOOT IN INFANTS.

Isadore Zadek, New York (Journal A. M. A., Aug. 21, 1920), urges that the treatment of congenital clubfoot should be begun early, at the age of two weeks, and it should be continued until the dorsum of the foot rests easily against the lower end of the leg. This position should be maintained for about two months, if there is no tendency to recurrence, as in the average case. In the usual run of cases no brace is indicated. Too much reliance is placed in the use of clubfoot braces. The conventional brace is only retentive and not corrective. Frequent daily manipulations, opposite the original deformity, are essential until the correction is assured. Many so-called relapses in congenital clubfoot, treated early, are due not so much to the tendency for deformity to recur as to the lack of sufficient treatment.

CAUSES OF EMOTIVITY AND THEIR MANAGEMENT.

Perturbations of emotion are frequent causes not only of inefficiency, but also of ill health of the body itself. According to Tom A. Williams, Washington, D. C. (Journal A. M. A., Aug. 21, 1920). Many physical conditions are characterized by disturbances of feeling, emotion. Intoxications, many infections and visceral diseases all disturb the emotions, and often seriously. So do many diseases of the nervous system itself, such as cerebrospinal syphilis, disseminated sclerosis, neoplasms, and what are called the great psychoses. These are all disorders of somatic source, the emotional disturbances being incidental, and not susceptible of being dealt with fruitfully by psychologic means; for only the disappearance of a diseased bodily state will dissipate the morbid emotion in cases of this kind. The treatment of morbid emotions of this kind depends on the finding of the situation, the prospect of which determines the emotion.

Treatment of Combined Diabetes and Nephritis.

In 100 unselected diabetic cases in which examination was made by Frederick M. Allen, J. W. Mitchell and J. W. Sherrill, New York (Journal A. M. A., Aug. 14, 1920), the blood urea was found below 30 mg. per hundred c.c. in

sixty-seven; between 30 and 40 mg. in seventeen; between 40 and 50 in ten, and above 50 in six. The McLean urea index was found below 80 in fourteen cases. Four of these patients were clinically nephritics. In addition, there were twelve cases of hypertension with traces of albuminuria, and seventeen cases with palpably sclerosed peripheral vessels without albumin or hypertension. The treatment of combined diabetes and nephritis is conducted according to the usual principles for the two diseases. Diabetic treatment by means of a high protein diet, gluten bread and the like may be inimical to an associated nephritis with impaired nitrogen excretion; but it is readily possible to adjust the protein ration to both diseases. If meats are forbidden in the treatment of hypertension, the diet of a diabetic with hypertension is seriously limited; but with restriction of salt, such a patient is able to choose his protein at will. In the majority of combined cases the diabetes or the nephritis or both are mild, although sometimes they are severe. There is no serious conflict in the treatment even here. The diabetes does not interfere with protein restriction for the nephritis, or salt restriction for the hypertension. There is an actual problem in providing the necessary calories. This is solved by undernourishing the patient to the point at which he can tolerate 30 gm. of carbohydrate. Incidentally, the unusually low protein ration raises the tolerance for carbohydrate. With this carbohydrate, it is possible to fill up the rest of the diet with fat without acidosis. The relief of the hypertension relieves the heart, and the patient is capable of more exercise and work than before. At the same time, the weakness of diabetes and undernutrition seems not to impair the heart, but is the greatest safeguard against overtaxing. Three illustrative cases, demanding great judgment in treatment, are cited.

Alcohol Injections in Trigeminal Neuralgia.

It is pointed out by Harvey Cushing, Boston (Journal A. M. A., August 14, 1920), that deep extracranial injections of alcohol into the maxillary and mandibular nerve trunks near their foramina of exit from the skull have completely superseded peripheral neurectomies. In neuralgias limited to one of

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the two lower divisions and which may possibly not extend into the other trigeminal areas, alcohol injections represent unquestionably the treatment of choice. When the neuralgia has spread beyond its original area and come to involve that supplied by the adjacent division, a trigeminal neurectomy must be contemplated; but if no preceding deep injection has been given, it may be useful not only in insuring the type of the neuralgia but in giving the patient some warning as to what the numbness resulting from the neurectomy may amount to. They are sometimes useful, furthermore, in determining in doubtful cases whether the syndrome is a true neuralgia of the *tic douloureux* type or one of the peculiar and rare pseudo-neuralgias not amenable to relief either by injections or neurectomies. Even the extracranial injections are not entirely free from risk, and in no cases should they be purposefully pushed to the point of attempting an injection of the gas-serian sheath itself. With such perfect and permanent results as may be secured today by a trigeminal sensory root avulsion, the prolonged and repeated use of injections in refractory cases which involve more than one division should be deplored.

Gastric Test Meal.

Gastric analysis is either functional or specific, and in both fields it has its limitations. According to Martin E. Rehfuess and Philip B. Hawk, Philadelphia (*Journal A. M. A.*, Aug. 14, 1920), the fractional analysis of a test meal is an exact determination of secretory and motor function, and the results of these two studies can demonstrate only alterations in function. Functional alterations may be functional or organic in origin. To the analysis of motor and secretory function should be added the demonstration of specific pathologic elements, such as blood, pus, mucus and bacteria. Only the evidence of cancer cells or the persistent presence of pathogenic infecting organisms can be considered pathognomonic. The interpretation of gastric analysis presupposes a knowledge of the normal gastric output. This is now well defined for both the periods of gastric activity and rest. These normal variations are given above. The secretory normal response can be divided into three types, but in

disease any variation can occur. Disease may alter either the digestive or interdigestive curve or both; it may alter function and it may add its specific elements to the sum total of gastric work. There is no pathognomonic curve in gastric cancer, ulcer, the inflammations or, for that matter, any of the gastric conditions. We can only say that it may, and usually does, produce definite types of secretory and motor alterations and definite forms of pathologic elements. A sane view of this subject is urgently necessary, and, most of all, is needed constructive work on the factors which induce alterations in function, as well as the isolation and demonstration of those pathologic elements which indicate a true gastric pathologic condition. Nowhere else is this so essential as in the study of gastric carcinoma.

Coagulation Time of Blood.

Statistics from the New-Born Clinic, University of Minnesota, show that postmortem examinations reveal cerebral hemorrhage in more than 50 per cent. of all infants that die *intra partum* or during the first few days of life. It was notable that these findings often were made following noninstrumental or even easy deliveries. They were especially frequent following breech presentations and in premature births. The factor of asphyxia neonatorum to which Little, Cushing and others ascribe the cerebral damage, F. C. Rodda, Minneapolis (*Journal A. M. A.*, Aug. 14, 1920), says was not always present. It was further noted that at necropsy the blood was often found only slightly coagulated or even fluid. Severe trauma results in massive hemorrhages and early death. A more frequent cause of cerebral hemorrhage is mild trauma plus hemorrhagic disease of the new-born, accompanied by findings of delayed coagulation time and prolonged bleeding time. A delayed coagulation and prolonged bleeding time can be controlled by the subcutaneous injection of whole blood. This is a rational therapy in cerebral hemorrhage. In severe cases, surgery should be employed early; operation should be controlled by blood studies and the injection of blood if indicated. The coagulation time and bleeding time should be determined in every new-born presenting unusual symptoms, or better, as a matter of

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routine. If reactions are delayed, blood should be administered.

Endocrine Imbalance in Feeble-minded.

One hundred cases of feeble-mindedness were studied clinically and post-mortem. Data were collected from a gross pathologic study of this series of brains and somatic organs, especially the ductless glands. In one-third of the cases a microscopic examination of the glands was also made. Aplasia, hyperplasia, pigmentation and interstitial change not due to age, glandular proliferation, anomalies such as absence or accessory organs with lessened or increased function, besides special changes in the secreting epitheliums and cells of the individual and various glands are the main factors included in the summation of the changes. The evidence of gland changes without particular reference to endocrinology is so constant and multifarious that Oscar J. Raeder, Boston (Journal A. M. A., Aug. 21, 1920), states emphatically that they must be regarded most seriously. There were gland changes of one sort or another in 74 per cent of cases. Marked gland changes occurred in 21 per cent. With the constant and characteristic bony and soft tissue changes microsomia, lowered resistance to infection, poor circulation, loose jointedness and changes in the glands of internal secretion, Mongolian idiocy bids fair to be founded on an endocrine pathology. The internal secretions begin to exert their influence early in the life of the organism. It is known that permanent adjustments of the other glands and tissues follow on the absence of dysfunction of one gland or set of glands. In order to avoid such permanent changes as infantilism, dwarfism, acromegaly, microcephaly and feeble-mindedness, it is imperative that these conditions be recognized and remedied by supplying the deficient hormone or inhibiting the hyperfunction of a gland early in the course of the disease. After permanent adjustments have formed, improvement is difficult; with early treatment, results are often little short of marvelous. Much of the finer pathology of the ductless glands is concerned with biochemical reactions. Further studies of feeble-mindedness by physiochemical and roentgenologic research would seem to throw more light on this obscure field.

Studies in Basal Metabolism.

From an experience extending over fourteen months and involving approximately 750 determinations on 350 persons, A. M. Snell; Frances Ford and L. G. Rowntree, Minneapolis (Journal A. M. A., Aug. 21, 1920), are convinced that determination of the basal metabolic rate yields results which vary only within narrow limits, which are reliable and consistent, and which are of practical value in following the clinical course of the case. In twenty-five determinations on nine control subjects, the greatest variation found in the rate of an individual case was 10.5 per cent, the average variation being approximately 5 per cent. In order to ascertain the extent to which exercise affects basal metabolism, the rate of several subjects was determined immediately subsequent to moderate exercise. The changes encountered emphasize the need of careful control in this connection. The increase in rate varied from plus 34 to plus 87. The effect was also determined on six subjects within two to four hours after the ingestion of a continental breakfast valued at approximately 200 calories and consisting of buttered toast, postum, cream and sugar. The increase in rate varied from 0 to plus 7. A rather constant rise occurs during menstruation or in the premenstrual period, the rise being followed by a postmenstrual fall. The possibility exists that ovulation may be responsible for this rise either directly or indirectly. In a group of thirteen cretins, the metabolic rate varied from -7 to -25 . No constant or absolute parallelism between the clinical manifestation and the metabolic rate could be established, although, generally speaking, some agreement existed. In thirteen cases of hyperthyroidism, which were typical clinically, the basal metabolic rate ranged from plus 20 to plus 82, the rates being approximately proportionate to the clinical evidences of thyroid intoxication. In a series of eleven cases of thyrotoxic adenoma, the rate was lowered under treatment. A group of seven pituitary cases has been studied, including two cases of Frohlich's syndrome and five of primary diabetes insipidus. The basal metabolism rate was increased under sodium cyanid treatment. From the data presented it is evident that no profound or lasting effect on basal metabolism has resulted from the administra-

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tion of desiccated powder of the anterior lobe by mouth, or from the subcutaneous use of the extract of the posterior lobe by mouth, or from the subcutaneous use of thyroxin to anterior lobe extract resulted in two cases of Frohlich's disease in a marked increase in metabolic rate which was somewhat in excess of that induced by similar doses in normal persons. The fall of metabolic rate accompanying the period of fasting in the treatment of diabetes mellitus is striking. Several cases of leukemia and splenomegaly were found to exhibit a metabolism considerably above normal. The only instance encountered of a subnormal rate in leukemia was in a case in which splenectomy had been performed some years earlier. The effect of drugs on the rate was also studied. Moderate doses of potassium iodide were negative. The use of sodium cacodylate was disappointing. The authors believe that the rest, rather than the cacodylate, was responsible for the results obtained. Concluding, it is stated that the basal metabolic rate is of the greatest significance in diseases of the endocrine system, particularly in diseases of the thyroid, revealing the extent of the increase in metabolism in exophthalmic goiter and in the thyrotoxic adenoma, and of the decrease in metabolism in cretinism and myxedema and allied conditions. The basal metabolic rate furnishes an accurate index to the results of medical and surgical treatment of these conditions, and thereby becomes of value as a guide to treatment. The basal metabolic rate is of value in revealing the effect of drugs on metabolism.

VIENNA PHYSICIANS DESTITUTE.

Vienna is today battling for its very existence. The gay crowds of well dressed people and elegant equipages which once thronged the magnificent Ring and the lovely Prater have long since vanished. The fine trees of the Wiener Wald have become victims of the woodchopper.

A recent dispatch to the Musical Courier says: "Vienna is the saddest city in the world. If one is soft hearted, it is difficult to repress the tears as one wanders through its once brilliant streets. While one stops to greet a friend, three beggars or more appeal to one's charity. And such beggars: ragged and haggard, emaciated, yellow

creatures that once knew joy. As one rides through the streets poor mothers with thin, paper-skinned babies look at one from the curb. Hands stretch out from everywhere."

A prominent New York banker, recently returned, says: "All that class (professional people) are left with absolutely nothing. All the time I was in Vienna I couldn't help feeling that I was living in a morgue. Beautiful streets, a beautiful opera house and the city beautifully kept—but nothing doing. It is terribly depressing."

Viennese physicians are in desperate straits. Their work must go on at all events, in an effort to combat the increasing mortality and alleviate the many ills of an undernourished population. But they cannot feed their little children with the scanty government ration, even when supplemented with their pitifully meager incomes.

The American Relief Committee for Sufferers in Austria, 261 Madison Avenue, New York, of which Hon. Frederic Courtland Penfield, late American Ambassador to Austria-Hungary is honorary chairman, has created a special fund for the relief of destitute Viennese physicians and surgeons.

Contributions may be made to Alvin W. Krech, President, Equitable Trust Company, 37 Wall Street, New York City, Treasurer of the Committee.

INTERNATIONAL ASSOCIATION OF PNEUMOTHORAX ARTIFICIALIS

Lugano, August, 1920.

The International Association of "Pneumothorax Artificialis," of which the work was paralyzed during the long war, desires to resume its activity by inviting all former members of the Association to renew their subscription and all other physicians interested in artificial pneumothorax to send their names and addresses to Prof. Umberto Carpi, Lugano, Switzerland, and to become members.

The purpose of the association is to spread all practical and scientific information concerning artificial pneumothorax. Although induced pneumothorax for therapeutic purposes has become remarkably prevalent ("Bien que la diffusion de la therapie du Pneumothorax soit devenue tres remarquable"), it has remained a therapeutic procedure applied only by physicians specially trained and experienced in this operation.

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For the convenience of the patients who may be obliged to change their residences, to know the names and addresses of physicians who practice artificial pneumothorax is of great value, in order that the patient may continue the treatment by periodic refilling. A complete list of physicians practicing artificial pneumothorax will be published with the scientific journal known as "Pneumothorax Therapeutique" for 1920-1921, edited by Carlo Ferlanini. This list will be sent to all the members and to the most important medical societies, medical academies, and similar institutions of the different countries. In the journal will be enumerated and discussed all the world's literature on pneumothorax. The association will continue its labors under the policy indicated by the illustrious master and creator of artificial pneumothorax therapy. As soon as the finances of the society will permit the renewal of the publication, the editor will put himself in communication with the editors of such medical journals of other countries as are publishing articles on artificial pneumothorax. For the present these are "die Sonderhefte des Tuberkulose Centralblattes ueber Lungenkellapstherapie" and the collected monographs in the journal "La Tuberculosi" which appears in Rome. (I trust that our very excellent "American Review of Tuberculosis," edited by Prof. Allen K. Krause of Baltimore, will be included in this list. —S. A. K.)

The subscription price of 5 francs should be addressed to the General Secretary, Prof. U. Carpi, Lugano. The subscriber is entitled to receive the journal with the list of names. Those who desire to receive the monographs of the journals indicated should make a request for them to the General Secretary who also has an international exchange office for all publications appertaining to artificial pneumothorax. Summaries in English, French, and German on any topic relating to artificial pneumothorax will be gratefully received and published. PROF. U. CARPI, General Secretary, Lugano, Switzerland

Is Epilepsy Hereditary?

Hartenberg, in *La Presse Medicale*, states that in eighty cases investigated from this viewpoint, only three showed epilepsy in the ascendants. Since the disease is thus no source of reproach to

the family, it need not be concealed. It is somehow acquired and is casual or accidental, and should not be regarded as incurable. In the discussion that followed Tellemer conceded the rarity of epilepsy in the patient's ascendants, but has found that if epileptics marry, their children seem tainted in some way. Laignel-Lavastine cited in addition to himself Pierre Marie, Babinski, and Comby, none of whom believed in the heredity of idiopathic epilepsy. This means that epilepsy is no autonomous disease, but a syndrome. In some cases the accidental cause is apparent, as an infection in early childhood which sensibilizes the brain. Blind agreed with the other speakers, and he believes the Scandinavian laws forbidding the marriage of epileptics to be unjust. In closing, Hartenberg agreed that epilepsy is a syndrome and that the term idiopathic epilepsy means nothing, although it is very handy to indicate the affection in an otherwise normal subject. It does not differ essentially from so-called symptomatic epilepsy in which some alleged cause is apparent. Cranial wounds and other individual factors can cause essential epilepsy as well as atypical forms by sensibilizing the brain.

Health thoughts induce healthy actions, which in their turn make health habits and habits make character. The object of the Modern Crusaders movement, is the formation of character based on correct habits. Last year it was taken up by some of our best schools, both in city and country. The good it accomplished was marked. It is to be hoped that the work will be taken up where left off and pushed more systematically than ever.

With the opening of the schools comes the danger of spreading infection. With so many children coming into close contact, sitting in the same room, mingling in play, using often the same text-books and the same drinking cups, it would be strange indeed if we did not get an occasional epidemic. It is exceedingly important that the school nurse and in her absence the teacher exercise great care in detecting incipient cases kept under close supervision until the danger is past. "He that would be good must be happy, and he that would be happy must be healthy" is a good motto for the school.



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Indifference of Laryngologist Toward Tuberculous Laryngitis.

William V. Mullin, Colorado Springs, Colo. (Journal A. M. A., July 31, 1920), urges that a more active interest in tuberculosis should be taken by laryngologists. There should be more thorough and uniform teaching of the diagnosis of this disease, and it should be carried on in such a way that the student will have opportunity to examine large numbers of incipient cases, and to see these repeatedly, and thus familiarize himself with the laryngeal image seen in tuberculosis as compared with that found in other allied conditions. Mullin suggests that a committee of laryngologists representing the various laryngologic societies may be formed to meet with a committee from the National Association for the study and Prevention of Tuberculosis for the purpose of standardizing the literature and teaching of this subject, and with the further object of stimulating clinical investigations and pathologic research concerning this condition.

Soaps in Relation to Their Use for Hand Washing.

Sterile hands are not obtained in the ordinary process of hand washing. More bacteria were found by John F. Norton, Chicago (Journal A. M. A., July 31, 1920), to be removed by the ordinary toilet soaps than by the special soaps. In other words, the cleansing properties of a soap are more important than its "germicidal" or "antiseptic" constituents. The soap solutions obtained

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in hand washing are of no practical germicidal or antiseptic value. The soap left on the hands after washing has no

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germicidal action. In the whole process of hand washing done in the usual manner, the special so-called "germicidal" or "antiseptic" soaps exhibit none of these properties. Therefore, these terms are not proper to use in connection with soaps. Finally, since the hands may serve as a medium for the conveyance of bacteria in infectious disease, it is important to remove these bacteria; and this may be done by the ordinary toilet soap as effectively as by the special brands of so-called "antiseptic" or "germicidal" soaps, if not more effectively.

UNITED STATES CIVIL SERVICE EXAMINATION.

Pharmacologist, \$3,000, August 31, 1920

The United States civil service commission announces an open competitive examination for pharmacologist. A vacancy in the public health service, Washington, D. C., at \$3,000 a year, and vacancies in positions requiring similar qualifications, at this or higher or lower salaries, will be filled from this examination, unless it is found in the interest of the service to fill any vacancy by reinstatement, transfer, or promotion.

All citizens of the United States who meet the requirements, both men and women, may enter this examination; appointing officers, however, have the legal right to specify the sex desired in requesting certification of eligibles. For the present vacancies male eligibles are desired.

The duties of the appointee will consist of research work in the chemotherapy of tuberculosis.

Competitors will not be required to report for examination at any place, but will be rated on the following subjects, which will have the relative weights indicated on a scale of 100: (1) Education, 40. (2) Experience, 40. (3) Publications or thesis (to be filed with application), 20.

Under the first two subjects competitors will be rated upon the sworn statements in their applications and upon corroborative evidence.

Applicants must have an M. D. degree and at least a B. S. degree from institutions of recognized standing, and at least three years' postgraduate experience in experimental pharmacology or physiology, such experience to have included study of the physiologic action

of drugs. In addition, applicants must show that they have a reading knowledge of French and German.

Applicants must have reached their twenty-fifth but not their forty-fifth birthday on the date of the examination. Age limits do not apply to persons entitled to preference because of military or naval service. To be entitled to retirement with an annuity employees in this position must reach their seventieth birthday, and have served fifteen years.

Applicants must submit with their applications their unmounted photographs, taken within two years, with their names written thereon, which will not be returned to them. Proofs or group photographs will not be accepted.

Applicants should at once apply for Form 2118, stating the title of the secretary of the United States Civil Service Board, Customhouse, Boston, Mass., New York, N. Y., New Orleans, La., Honolulu, Hawaii, Post Office, Philadelphia, Pa., Atlanta, Ga., Cincinnati, Ohio, Chicago, Ill., St. Paul, Minn., Seattle, Wash., San Francisco, Calif., Old Customhouse, St. Louis, Mo., Administration Building, Balboa Heights, Canal Zone, or to the chairman of the Porto Rican Civil Service Commission, San Juan, P. R.

Applications should be properly executed, excluding the medical and county officer's certificates, and must be filed with the civil service commission, Washington, D. C., with the material required, prior to the hour of closing business on August 31, 1920.

"Christian Science" and the Material Press Agent.

The letter from the "Christian Science Committee on Publication" which appears in the correspondence department of the June 5th issue J. A. M. A. is further evidence of the smooth functioning of the publicity department of the late Mrs. Eddy's organization. Let there appear anywhere a published item that may seem, either directly or remotely, to refer unfavorably to "Christian Science" and forthwith the editor receives a letter from the local "Committee on Publication" supplemented, possibly, with a flood of letters from members of the cult. Woe to the newspaper man who exposes, be it ever so gently, the fallacies of "Science"

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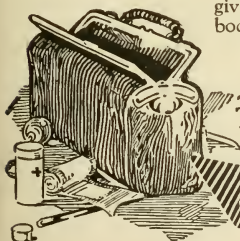
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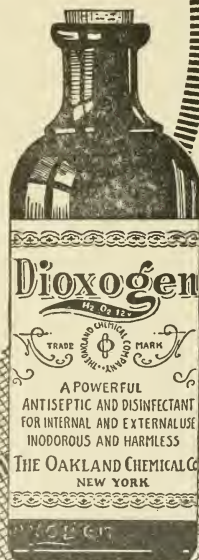
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which is miscalled "Christian." One can but admire the well-oiled publicity machinery of the "Christian Science" organization. Its upkeep must be heavy but it hits on all cylinders. If the medical profession maintained a publicity department that cost a hundredth part of the "Christian Science" press agency, hands would be raised in holy horror and from the house-tops would come the cry: The very foundations of our civil liberties are threatened. Whatever the "Christian Scientists" believe about the immateriality of disease—and just what they do believe is not clear—they are obviously of a mind when it comes to maintaining a material publicity department with material funds.

CANCER OF THE RECTUM.

The possibility of a permanent cure of cancer of the rectum by operation G. W. Crile, Cleveland (Journal A. M. A., July 31, 1920), says depends more on the stage at which the case is presented for operation than on even the most thoroughgoing technic; but maximum of operability, which means a safe operation with the removal of the maximum amount of tissue surrounding cancer, is a possible attainment.

To cancers which involve the lumbar muscles, which penetrate the bladder, which involve the liver, etc., operability does not apply. Death is generally due to infection and to the absorption of the toxins of feces. Among thirty-eight operative cases, Crile has not had a death.

Surgery of the Thyroid.

In view of the relationship of laryngology to disease of the thyroid body, and of the fact that the growth of laryngology has been in the direction of cure by surgical methods, John F. Barnhill, Indianapolis (Journal A. M. A., June 5, 1920), asserts that the assumption to surgery of the thyroid on the part of the laryngologist may seem most natural, and perhaps may ultimately prove helpful. He reviews the essential points in diagnosis and the important factors in thyroidectomy. His personal operative experience is based on 150 cases, in which there were no deaths, probably because 80 per cent of the cases had been nontoxic goiter, and of these nearly all the earlier pa-

tients had enlargement only of the central lobe. These patients were nearly always in good health, except for pressure symptoms and nervousness. Such cases are good surgical risks. More than 90 per cent of all cases have had clearly evident diseases of the tonsils, and judging them from the most modern point of view as to what constitutes a diseased tonsil, Barnhill thinks practically all may rightly have been classed as having foci of infection in the tonsil. In more than 50 per cent of his cases of goiter in which operation was performed during this period; the tonsils were removed before the thyroidectomy, sometimes as long as a year previously, in the hope that the goiter operation might thus be avoided. Clinical experience seems to justify the belief that when the thyroid is once diseased, from whatever source, the removal of the tonsils has but little effect on the future course of the thyroid ailment, but does, of course, improve the physical condition of the patient, and that tonsillectomy is, therefore, to be recommended as a preoperative measure of great value.

Increasing Tissue Resistance in Syphilis

It is fairly well accepted by the profession that antiluetic agents are not spirocheticides in the true sense of the word, but that their specific value lies in their power to make the tissues more resistance, and hence, less hospitable to the organism of this disease. In short, the ideal treatment of syphilis has for its purpose the increase of the tissues' natural defensive forces.

A rundown patient contracting syphilis does not make the response to treatment that a sturdy individual does, and the reason is that his natural defensive forces are reduced to the point where a successful fight against the luetic infection cannot be made. It is in this type of cases that a tissue builder such as Cord. Ext. Ol. Morrhuæ Comp. (Hagee) is of the utmost value in charging the tissues with greater resistance and thus enabling them to contend against the disease and also to respond with more promptness and better effect to the power of antiluetic drugs to stimulate the tissues to a point where an inhibitory effect is exerted on the propagation of the spirochete.

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Delegates.

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To Virginia Medical Society—Dr. Fred M. Haynes,

Winston-Salem; Dr. Kendrick, Elizabeth City;
Dr. B. C. Nalle, Charlotte.
To South Carolina Medical Society—Dr. D. A. Stanton, High Point; Dr. W. A. Monroe, Sanford; Dr. W. R. McCain, Waxhaw.

Committees Elected.

Scientific Work—Dr. E. J. Wood, Wilmington; Dr. Richard N. Duffy, New Bern; Dr. C. A. Shore, Raleigh.
Publication—Dr. P. B. McCain, Sanatorium; Dr. C. A. Julian, Thomasville; Dr. W. L. Dunn, Asheville.
Obituaries—(Continued) Dr. Arch. Cheatham, Durham; Dr. E. G. Moore, Elm City; Dr. F. R. Harris, Henderson; Dr. N. D. Bitting, Durham; Dr. B. O. Edwards, Asheville.
Public Policy and Legislation—Dr. H. A. Royster, Raleigh; Dr. L. B. McBrayer, Sanatorium; Dr. Cyrus Thompson, Jacksonville.
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No. 4

MANIC-DEPRESSIVE INSANITY

By Jas. K. Hall, M. D., Westbrook Sanatorium,
Richmond, Virginia.

Mania and melancholia are old medical terms. For many years they were used, however, merely in a general way, to describe two apparently opposite abnormal mental conditions without reference to the cause, nature, or course of the aberration. The manic is the classic type of the insane individual. The disregard for personal appearance, the wild glaring eyes, the piercing shrieks, the foolish laughter, the incoherent speech, the flightiness of ideas, the exhibition of homicidal outbursts, the inclination to destroy everything within reach, the unceasing mental and physical activity, the uncanny responses to imaginary sounds and sights, the egotistical feeling of well-being, the extremely mutable emotional state—all these symptoms in a group were long suggested by one word, mania. No other condition marks such extreme departure from the mental normal. The manic incarnates the layman's idea of insanity. Nebuchadnezzar, an ancient representative of the Lord's displeasure, is a biblical example of man in the world's highest station brought down by mania to the level of the beasts of the fields.

Melancholia presents a departure from the mental normal almost as striking, but in exactly the opposite direction. The depression may be so extreme as to cause inhibition of almost all physical activity. The individual may sit unmoved for hours at the time, the face immobile, disturbances in environment unnoticed, speech abolished, and the impulse to eat and to swallow may be lost, and tube feeding by the nose may become necessary. Inattention to the demands of nature are not unusual, and such patients require constant care. If speech be not abolished, expression is given to delusions of the

most distressing nature. The patient relates with pronounced conviction the belief that his soul is forever lost; he tells of the awful crimes he has committed; he may experience peculiar bodily sensations, which lead to the belief that his stomach has grown up, his heart has ceased to beat, the bowels have decayed, there is no room for food, an evacuation is impossible, and the brains have turned to sawdust. Accompanying this distressed state of mind there is not infrequently corresponding physical agitation; the patient paces the floor, wrings his hands, pulls his hair, bites his nails, bemoans his fate, and often becomes noisy. The impulse to commit suicide is sometimes uncontrollable.

Within the past few years, a young man of thirty-six, who had for several years been in the service of the Federal government, was brought to the Sanatorium in a state of great excitement. For two or three weeks he was noisy, profane, destructive to clothing, untidy in habits, and unceasingly active. He heard the Lord's voice, saw angels, the devil, and many other strange sights, in an absolutely plain room. He did not know where he was, there were no inquiries about his family, he lost from memory the day, the month, and the year; it was difficult to induce him to remain quiet long enough to take sufficient food; he lost weight, sleep was almost abolished, and emotional instability was extreme. Within a few moments he would pass from good-natured playfulness into the most troublesome pugilistic mood. Gradually the psychic and the physical excitement subsided, normal sleep returned, the appetite reasserted itself, increase in weight was rapid, and after ten weeks he was in normal mental health. He resumed his responsible position, and he now laughs at his strange capers and his queer delusions. The Wassermann was negative, the physical condition was perfect, and in the material domain nothing could be found to account for the mental disturbance. The paternal mental heredity was not sound, however, and

*Read by invitation before the Eighth District Medical Society of North Carolina at Wentworth, September 1, 1920.

some undiscovered cause probably aroused a latent mental instability. This young man's condition represented a fairly typical case of acute mania.

True melancholia, as that referred to above, occurs only during the involutional period of life, and it is much more common amongst women, but profound mental depression, not always differentiable from melancholia, may be encountered at almost any age, and in either sex. Some of the most prominent symptoms of such a condition are suggested by the compound word, psychomotor depression. In well-marked cases, comprehension is lessened, the surroundings are not fully understood, the sense of time may be lost, the least complicated statement may not be understood, but the most prominent feature of this type of depression is the individual's inability to respond promptly to a stimulus. Mental processes are converted with great difficulty and with much delay into motor manifestations. This peculiar condition of delay in the response to stimulation is known as psychomotor retardation. It is the most prominent symptom of this type of depression. When, for instance, the patient is asked his name he may sit perfectly still for half a minute or for several minutes, as if he did not hear, but he then replies correctly, by giving his name. If asked to stand up he seems for a few moments not to have heard, and then he stands up. Somewhere in the process between the request or command and the motor response there is difficulty in conversion. This type of depression has other features not unlike those of genuine involutional melancholia. For instance, the countenance is often immobile, or, it may look troubled; activity is generally lessened, and it may be abolished; the patient may sit or stand like a statue; frequently, forced feeding is necessary; there may be inattention to the discharges, and interest in the environment may be entirely absent. Such patients may be described as depressed, mute, stoical, indifferent and untidy.

A few years ago, a boy of eighteen, of previous good health and habits, became gradually depressed; after only a week he became mute, he would not eat, untidiness developed, he would respond in no way to requests or commands, and, after having been in this condition for two weeks, he was brought

to Westbrook. All these symptoms became even more pronounced for three or four weeks, but improvement came about slowly, and within ten weeks from the beginning of the departure he was again at work as the trusted secretary of a bank president of this city. For several weeks the boy was absolutely speechless, and any movement had to be initiated by a brain other than his own. After recovery, he told me that he thought I was the Lord, that for a long time he believed the blasting to be heard in the quarries several miles from Westbrook, were efforts to blow him up. His physical condition had always been good; but his mother was mentally unstable, and sister was hysterical. The real cause of his rather sudden mental collapse is unknown. I might add in all truthfulness, too, that the cause of his restoration to the mental normal is likewise hidden from me. The facts are that once the boy seemed to be mindless, but since recovery his employer states that he is able to do more efficient work than ever before.

The two cases presented above in some detail illustrate opposite phases of marked mental abnormality—one, the condition long known as mania; the other, the condition manifesting profound mental and motor depression and long known as melancholia. In recent years the tendency has been to regard both conditions as manifestations of the same underlying disorder, and this peculiar mental make-up, exhibiting even in the same individual at one time great elation and excitement and at another time profound depression, is now referred to by the embracing term, manic-depressive mental disorder. Individuals manifesting this peculiar form of mental unstableness are extremely common, and most cases of so-called mania, and most of the cases of depression not due to organic or extraneous causes, come in this category. However pronounced the mental disturbance may be, whether manifested by excitement or by depression, if the physical condition be good, the tendency is towards recovery. Most of the cases discharged, as recovered, from State hospitals belong to this group.

In one individual the attack may always be one of maniacal excitement, and the return to the normal may take place without subsequent depression.

In another individual of unstable make-up the disorder may always show itself in depression, and recovery may follow without a period of exhilaration. In many weakly-stable persons, however, attacks of so-called mania may rapidly follow periods of profound depression, or vice versa, but between these abnormal states there may be periods, varying in length from weeks to years, in which the individual may be altogether normal.

In a paper read before the meeting of the Tri-State Association in Charleston in February, 1915, Tucker, of Richmond, described the condition both diagrammatically and by text. Jellife, of New York, has also written interestingly about the disorder. The opinion of all observers is that the outlook for recovery from the individual disturbance is good. The probability of recurrence, however, is strong. In other words, the immediate prognosis is good; the permanent prognosis is bad. The reason is that in most of these cases there is bad mental heredity, and the individual attack, maniacal or depressive, are outbursts of a deep-seated, latent, mental instability.

The old statement that it never rains but it pours cannot be made use of literally in the field of mental medicine. Many bad conditions occur in modified form. The cases that I have made use of above for illustrative purposes were so clearly abnormal and so clear-cut that the layman, absolutely ignorant of mental conditions, would have guessed the correct diagnosis. These same mental disorders, however, in larval form, if I may use the term, are not recognized by a great many physicians. The world has in it, for instance, many mildly maniacal people—people who are unceasingly and often purposelessly active, restless, stirring, egotistical, nosing, prying, disagreeable, euphoric busy-bodies. Many of these individuals are investigators and the leaders in reform causes. They never suffer from physical or mental fatigue, but instability of purpose is often prominent. For a little while they do one thing, only to tire of it and take up some other line of endeavor. But they never despair; they are always just about to succeed at last; failure is not among their words; hope is their guiding star. Mr. Wilkins Micawber is one of them. Generally they do not succeed because

they manifest, in a mild way, what the maniac exhibits more strikingly—unstableness of purpose. They do not stick to any one thing long enough to command success. Such an individual, I am quite certain, each of you is acquainted with. But not all such mildly elated and exhilarated persons are nuisances or failures. Many of the world's leaders are of this kind.

Such men are constantly keyed up. They are buoyant and hopeful, cheerful and inspiring, untiring and undismayed; they see no obstacles, fear no consequences, and are not disheartened by any number of failures. In their hearts success always abides. In this group belong, probably, "Chinese" Gordon, Julius Caesar, Napoleon, the Kaiser and Colonel Roosevelt—brilliant, restless, irrepressible, tireless, ambitious, versatile, many-sided men.

In marked contrast with the personality outlined above is the individual who is habitually and persistently dejected and gloomy. The particular way in which the depression may express itself is variable. In one person the manifestation may be through the physical domain. There may be complaint of hyperacidity, indigestion, kidney affection, spinal trouble, or sexual disorder. The digestive or the sexual apparatus serves in many individuals as a basis for a hypochondriasis. Not infrequently the complaint is lodged against the eyes, and glasses are changed again and again in an effort to right a wrong with which the eyes have nothing to do. Many women of this depressive temperament locate the cause of their unhappiness and anxiety in diseased pelvic organs, and many of them succeed, without much difficulty, in having their pelves thoroughly cleared out.

These gloomy, pessimistic, distrustful, unhappy, patients go from physician to physician; these are they from whom the patent medicine venders reap their rich harvest; these unfortunates support the quacks and the humbugs. Chronic mental depression does not always elect, however, to exhibit itself by a physical hypochondriasis. Some of these pessimistic and gloomy folk feel in excellent physical trim, however, but they manifest their peculiar and unfortunate temperament by arraying themselves against all that is—they are the chronic objectors. Whatever is, is wrong, whether it be in politics, in re-

ligion, in industry, or in the home. Mothers of this unhappy disposition criticise the minister, gossip in unseemly fashion about their neighbors, chase away the servants, array their children against their teachers, and drive their husbands to drink. Men who are so constituted rejoice in nothing. They criticise all in authority, oppose progress, glorify the past, and shake their heads dolefully about the future—they are prophets of evil.

Still more interesting, however, than the individual confirmed in elation or fixed in chronic dejection and pessimism, is the person whose emotional status passes through regular phases characterized, at one time, by mild excitement, and, at another time, by lessened activity, a tendency to isolation, and marked despondency and pessimism. Saul and David were of this emotionally unstable make-up. All of us meet such individuals in our daily life. They seek medical advice only when depressed, and the physician is most fortunate who chances to have such a one under his care just when the depression is lifting, for then he is credited with a cure. A man of such temperament is often successful during his period of elation, but his gains are frequently lost during his period of depression. Such emotional instability is generally the causative factor underlying frequent changes in business, religion, or politics, and lay people are inclined to place little trust in a man so unsettled. I know one man, now past middle life, who was at one time a hardware merchant, at another time a bookkeeper, still later a school teacher, and for a while he was a very active and acceptable minister, but when I last heard of him he had withdrawn from the church, because it would not prohibit its ministers from using tobacco, although he had used it for twenty years, and he precipitated a storm in a church meeting when he staunchly asserted his belief that no chewer of tobacco could find a place in heaven. Some of his acquaintances applied to him the very best mental terms they would think of—queer, peculiar, eccentric. I knew in North Carolina a man who preached periodically for years as an evangelist, only when elated; when depressed, he felt unfit for the ministry, but during these fits of dejection he was acting as a carpenter. In that same State

I knew, in his old age, an uneducated man, who was a bricklayer, and a drunkard in his younger days, but in middle life he became converted, and for many years he went about the state as a street preacher, bitter always in his assaults on alcohol. No one doubted his sincerity, but his diction was so unique that the newspapers always gave him much space. He preached, however, spasmodically, and there were frequent intervals characterized by a feeling of sinfulness and unworthiness so marked that he felt it sacriligious to lift his voice in prayer. During these periods of dejection he attempted suicide more than once, and in an insane asylum he finally succeeded in ending his turbulent life by hanging.

The mildest of such mental and emotional disturbances are spoken of ordinarily as "the blues" and the individual of mercurial disposition is known to all of us. In these unstable characters are often developed bad habits, which remain through life. A man who has periods of either marked elation or depression is much more likely to become an alcohol or drug habitue than is a stable, level-living man. Resort may be had to the substance either when elation loosens the bonds of normal restraint, or, voluntarily, in an effort to drive away gloom and despair. The tendency—and I am sure it is sound—is in favor of looking upon these habit-cases as fundamentally unsound, and the contraction of the habit is an evidence of mental or emotional instability, as well as a cause of mental and moral deterioration. Sexual outbursts occur at times, I am thoroughly convinced, in absolutely morally-minded men and women during an emotional elation which the world does not recognize as abnormal. Many a woman, on the contrary, during a fit of depression, accompanied by the feeling of jealousy and suspicion has made her husband unhappy by unjust charges of infidelity. Criminality of various kinds, I do not doubt, is often a manifestation of an uncontrollable emotional and moral outburst. But I must not tire you with other illustrative cases and interpretation which may not be acceptable.

Neither the time nor the requisite knowledge is at my disposal to enable me to talk intelligently to you about causes and about satisfactory treatment. In most of these manic-depressive cases causes long antedating the

birth of the individual are active. The mental heredity is often bad. Environmental disturbances are often factors in upsetting an unstable mechanism. Pain and discomfort, sorrow and despair, want and distress, excitement and dejection affect even the most stoical. When treatment is thought of, my usual optimism is tempered by the knowledge of the fact that these symptoms are generally but evidences of constitutional instability, and I ponder long before venturing to answer cheerfully and hopefully in the affirmative the great question of the great apostle, "Shall the thing formed say to him that formed it, Why hast thou made me thus?" But the environment, as far as possible, may be made more fit to live in by the particular individual through such changes as can be made. Excitement can be avoided, worry can be lessened, and anxiety can be mitigated. The physical being may be properly regarded as a part of one's environment, and it should, of course, receive first attention.

Finally, benevolent domination of such individuals by a personality stronger than their own, with the help that comes through re-education—through knowing themselves as they really are—constitutes the most important therapeutic measure.

THE CANCER PROBLEM.

By Dr. John Wesley Long, Director of the American Society for the Control of Cancer, read before Eighth District, North Carolina, Medical Society.

I shall not consider the late manifestations of cancer, since that is a subject which concerns the undertaker rather than the surgeon. Unfortunately, the insidious onset of cancer makes its early symptoms somewhat difficult to recognize. However, a knowledge of certain basic principles will aid us very materially in an appreciation of the initial symptoms. In fact, a pre-cancerous stage is a well recognized condition. We must remember that as yet we do not know the specific cause of cancer, if indeed it have a specific cause. But we are convinced of certain facts regarding the matter.

The first outstanding fact is that cancer is characterized by exuberant irregular cell growth. The development of every living thing, whether animal

or plant life, depends upon cell growth or cell division. It is interesting to know in this connection that plants and trees and the lower animals have cancers just as human beings do. All life starts from a single cell, one cell divides and becomes two cells, two cells divide and become four cells, etc. Without cell division there can be no life. This is true in abnormal tissue, such as cancer, as well as in normal tissue.

We are told that order is Heaven's first law. Embryologists learned long since that order is also the law of growth. As cells multiply by division, they always arrange themselves systematically, orderly, observing always the pattern of their peculiar species and the special part of the individual to which they belong. This orderly arrangement of cells was true from the beginning of time. Agassiz says: "I cannot repeat too emphatically that there is not a single fact in embryology to justify the assumption that the laws of development now known to be so precise and definite for every animal have ever been less so or have ever been allowed to run into each other."

We instinctively acknowledge this fundamental law. Suppose, for instance, we should chance to see an ostrich plume growing upon the head of a woman, or monkey's tail growing upon a man. We would at once recognize a violation of the law of species, and the abnormality would likewise be shocking to our refined sensibilities.

The superficial cells of the skin are ranged in overlapping layers, somewhat like the shingles on a house, while the cells of the secretory glands and other specialized structures are placed in single layers resembling upstanding columns packed closely together. Always, there is beneath the cells a so-called basement membrane, which has among other duties the special function of limiting the advance of cells in its direction.

Another phase of the question that I wish to invite your attention to, is the relation of chronic irritation to cancer development. As the constant drop will wear the rock, so irritation continued for a sufficiently long while, will greatly disturb cell growth. The result is that cell division is speeded up, as it were, and instead of simply producing new cells, sufficient to maintain the normal equilibrium, we have the exuberant

sprouting cauliflower growth characteristic of malignancy.

Not only is the multiplication of cells enormously increased, but the order of their arrangement is seriously disrupted. The cells crowd upon each other, making many layers, where formerly there was only one; they invade all surrounding structures. In a word, cell growth goes upon a rampage, and order gives place to chaos. Such are the effects of irritation upon the cells of the body.

Now, let us see if these basic principles of embryology plus pathology, can be applied to the ordinary facts of life. No science, my friends, can ever be worth anything to us unless it be applicable to the necessities of our existence as interpreted through the medium of common horse sense.

We are all familiar with cancer of the lip, and its frequent occurrence in men who smoke a short stem pipe, holding it almost constantly in their mouth. It is the irritation due to the pipe stem and the nicotine that disturbs the cell growth of the buccal mucosa, thereby initiating the morbid process which we call cancer. Once started, a cancer will grow without any further attention upon the part of its host. Cancer of the tongue, due to the irritation of a broken tooth, is a similar illustration. Neither the little fissure of the lip nor the indolent ulcer of the tongue have in the beginning pronounced symptoms, other than their presence. The most significant fact about them is that they don't heal. One should regard with suspicion any lesion that does not heal promptly under appropriate treatment.

The custom of chewing betel nut, practiced by the women of certain countries, holding a wad of the nut inside of their cheek, is said to be a frequent cause of cancer.

Every mole, especially the black elevated variety, every seed-wart that persists, offers an inviting field for the development of malignant growth, and in truth is a potential cancer.

In India oxen are used as draft animals almost exclusively. Instead of placing the yoke upon the neck as in this country, it is fastened to one horn. It has been observed that cancer of the horn upon which the yoke works is quite common, while it never occurs in the other horn.

The irritation need not necessarily be

mechanical. Sometimes it is due to thermic influences, especially heat. Dr. Wm. J. Mayo lays particular stress upon the influence of both heat and cold as a cause of cancer.

In China, where the principal article of food is rice, it is customary for the women to wait on the men first, serving them while the rice is hot. Afterward the women take their rice when it has become cool. Cancer of the esophagus is quite frequent among the men of China, while the women never have it. So you see there is some advantage in being a woman—in China.

Burns from the Kangri basket, in which coals of fire are carried beneath the clothing and slung so as to rest against the naked abdomen, are quite common in Kashmir. Cancer of the abdominal wall is so common that it is known as the Kangri cancer.

Again, the irritation of certain chemical agents play an important part in cancer production. The reaction of the stomach secretions is, as you know, distinctly acid, while that of the duodenum is alkaline. Cancer of the stomach is quite common, comprising about 30 per cent of all cases occurring in every portion of the body, while primary cancer of the duodenum has rarely been seen.

Cancer of the stomach presents a rather complicated problem. The late symptoms, such as pain, hæmorrhage, vomiting, emaciation, tumor, etc., point clearly to the cemetery by the short road. Recently a dear little woman, who was emaciated till she was only a "hank of hair and a pack of bones," as she expressed it, was referred to me for operation. She had passed through the hands of the stomach specialists, who told her six months previously, that she had a growth in her stomach which they thought they "could wash away." I could do nothing more than a gastro-enterostomy, which gave her temporary, but grateful, respite in the downward course. Persons who have pronounced persistent stomach trouble should seek competent professional advice, and do it early. They should have a gastric analysis and X-ray examination, both fluoroscopic and radiographic and above all go to a surgeon and an internist who work harmoniously and intelligently together.

Perhaps the most irrefutable argument that cancer is due to the irritation of trauma, is the fact that out of every

100 cases of cancer of the uterus, 97 of them occur in women who have borne children. In other words the uterus that has not been traumatized is practically free from the danger of cancer. I think one of the saddest things that I see is for a mother of several children with an inoperable incurable cancer of the uterus, to come seeking relief. For her there is no balm in Gilead. And all because of somebody's ignorance or neglect. If taken in time cancer of the uterus is as curable as a laceration and most assuredly it is preventable. A standing order for every child-bearing women should be "After each labor have all lacerations repaired." If at any time especially for those who are 30 years of age, there is the least irregularity of menstruation, go at once to a competent surgeon. A stitch in time here will save countless lives.

Cancer of the breast, which is so far advanced that the patient and her friends can recognize it as a cancer, is usually beyond hope of relief. But I am glad to tell you that there is a time when cancer of the breast may be cured. Every lump in a woman's breast should be regarded as a potential cancer and she should seek professional advice as soon as she discovers it, no matter how small or how innocent it may appear.

A short while before closing my Hospital to go to France a lady consulted me because of a lump in her breast. Her physician was a man of considerable ability, and she spoke most enthusiastically of him. She said, "I don't have any pain, but my doctor has been watching this lump for two and one-half years." I exclaimed, "My dear woman, your doctor must be a good Democrat." She asked why. "Because he believes in watchful waiting." The lump proved to be a carcinoma. Fortunately, an extensive operation, followed by X-ray treatment, cured the woman, or at least there has been no evidence of recurrence after four years.

Pain is never an early symptom of cancer, it occurs only late in the disease, sometimes not at all. It comes when the exuberant cells we have been talking about crowd and pack themselves into the tissues thereby putting pressure upon the nerve endings. I have been guilty of saying, I wish everyone who developed a cancer, would from the very beginning have sufficient pain to call their attention to its presence. If

cancer gave us from the start as much pain as an aching tooth we would get rid of it in short order. On the other hand, removal is not always possible, if pain were present from the beginning in every case it would condemn to the horrors of unmitigated torture those unfortunates who have cancer of the head of the pancreas, the mediastinum, certain portions of the brain, diffuse cancer of the liver, etc. As these patients often live in comparative comfort for many months, the malignant growth is often far advanced before it produces any pain whatever. The moral of this is, don't wait for pain.

When we come to deal with the cancer problem, we are confronted with ignorance among both the high and low. It is common knowledge that we have been cursed with the so-called "cancer doctor" from time immemorial. He usually has a secret formula, which has such discriminating virtues that it will eat out the cancer and not harm the healthy tissues. Bad as this is, credulity goes still farther. In my community, there is a man whom people ask to treat their cancers, and who does nothing more than rub their handkerchiefs between his hands and lay it on their sores. This sounds ludicrous, but recently I visited a great city, noted for its wealth, its learning, its philanthropy. In the midst of that famous center, I attended a meeting in a temple costing millions of dollars. I never saw a better dressed, more intelligent looking audience. They gave every evidence of culture and refinement. I have rarely seen so many limousines standing in front of any one building. Now one of the cardinal doctrines of those marvelous people is that cancer may be cured by the patient believing that he does not have cancer. We smile at their lack of knowledge, but do we always manifest more wisdom than they do in the exercise of their absurd belief? Even those who are nearest to us sometimes surprise us by the ignorance they display upon questions of vital importance to their health. For instance, the daughter of a surgeon, who is reputed to be fairly well up in his profession, married. In due course of time, she became a mother. During that critical period her father watched over her with most anxious solicitude, carefully supervising her diet, habits, secretions, etc. She passed through the trying ordeal

quite as nicely as if she had taken the once famous "twilight sleep." A few days later her father congratulated her upon the ease with which she had accomplished the supreme function of womanhood. In a burst of gratitude she said, "Yes, Mama had me to use \$3.00 worth of Mother's Friend."

I maintain that the responsibility of the cancer problem rests with the physician, and that it is our duty, as guardians of the public health, to educate the laity. This duty has been by force of circumstances, committed to our care. The trouble with the profession generally is that we do not quite live up to what we know. I know a physician who is the Health Officer of a large city. He is a fine jovial happy-go-lucky kind of individual. He takes his work easily, like he does everything else. The daily paper recently said of him, "Our City Health Department does not take itself very seriously nor its duties very energetically." How applicable that might be to many of us.

You remember when Phillip was travelling across the desert, he met an eunuch of high authority who had charge of the treasures of Candace, Queen of Ethiopia. He was sitting in his chariot, reading the book of Isaiah, the prophet. Phillip, under the guidance of the spirit, said to him: "Understandest thou what thou readest?" and the eunuch answered: "How can I except some man guide me?" Then Phillip got up in the chariot and sat down by the eunuch and taught him the meaning of what he was reading. The people are not to be censured for their woeful lack of knowledge concerning cancers, because we have not taught them as we should.

You will agree with me that the smartest thing the Germans did was spreading their propaganda. It kept the Allies guessing at all times. It captured 116,000 Italians at one fell swoop. It disrupted Russia, until they fell to fighting among themselves and are still devouring each other. It shook our own government until it rocked from center to circumference. If propaganda in the interest of error and falsehood, is such a powerful weapon, why should we neglect to use it in the cause of truth? It is to spread the propaganda concerning cancer to stir up your pure minds by way of remembrance that I am pressing this question home to you today,

in hopes that you will in turn spread the propaganda. When once the people see the truth as it is, they will rise in the power of their knowledge—for knowledge is power. They will weed out cancer quacks of every description and instinctively turn to the right source for relief.

Statistics usually make dry reading and are not remembered, but I want to give you a few figures that are very significant, and I hope will prove interesting to my audience. The mortality of cancer for certain civilized foreign countries, containing a population of 2,124,289,710, for an average of five years was 71.6 to the 100,000 population. The mortality for the registered area of the United States is 78.9 to the 100,000 population. The estimated number of deaths in the United States is over 80,000 per year from cancer. During the Great War the United States lost in two years about 80,000 soldiers; in the same time she lost 180,000 people from cancer.

Another significant fact is that while the death rate from typhoid fever, malaria, tuberculosis, etc., is decreasing, that from cancer is increasing. The rate of increase is about 2.5 per cent per annum. Among European countries the death rate in 1881 was 44.8, in 1911 it was 90.4. In the United States in 1900 the death rate was 62.9, in 1913 it was 78.9. In Massachusetts in 1871 it was 39.9, in 1911, 92.6.

Or, take the Southern city of Savannah. In 1881-5, the death rate from cancer to the 100,000 population was 37.2; in the five year period from 1906-10, the death rate was 47.1. Or, to take a single year, in 1901 the death rate in Savannah from cancer alone was 30.7; in 1914, or 13 years later, it was 60.5.

These figures are correct in spite of the fact that among American cities Savannah holds the minimum place of 47.1, while San Francisco holds the maximum place of 102.5.

Race is a determining factor in the matter of cancer. It is well known that negroes do not have cancer so frequently as do the white races. To again use Savannah as an illustration in 1914 the death rate per 100,000 among the negroes was 28.3, while among the whites it was 94. The census for that year gave Savannah more negroes than white people.

In the United States, the proportion of men and women are about equal, but the mortality among men is only 61.3, while among women it is 97.6.

Taking our population as a whole it is found that 85 per cent of the people who die from cancer are over 45 years old.

Therefore, in studying the cancer problem it is clearly seen that the aged are more liable to cancer than the young, women more susceptible than men, the white race more vulnerable than the negro race and that chronic irritation plays an important part in the etiology of cancer.

SOME PRACTICAL RESULTS WITH ORGANOTHERAPY.

C. M. Strong M. D., Charlotte, N. C.

Solomon was right when he said, "There is nothing new under the sun," and this is especially true in regard to Organotherapy, for in looking over the literature on this subject, I find that the Chinese, since remote antiquity, have used for pulmonary diseases the juice from macerated pigs lungs; for headaches, the intestines and their semen for chlorosis, anemia and impotence.

Only recently, however, has organotherapy been scientifically studied and used. It is a subject so broad and deep that I can only hope to skim on the surface and if per chance I should founder and sink all I ask is to save my life.

We all must admit the disappointments in the action of Galenical drugs in many cases and I wish to say here that I do not reflect nor do I wish to discard these old reliable friends, but if we can add to our armamentarium, especially in the handling of those obscure diseases of faulty metabolism, we are justified in the study and use of the organic extracts.

In a very humble way I have been investigating and trying out organotherapy for the past few years with some degree of encouragement and success and I propose in this imperfect paper to give you only personal conclusions.

There is no question but that the use of organic extracts is based on scien-

tific reasons. In order to make myself plain I would like to lay down a few premises which I think are true:

1st—There are secretions of the body open and internal.

2nd—They are necessary to health and life.

3rd—They are dependent on each other for proper functioning.

4th—The over or under—the hyper or hypo—secretion of any of the glands effect the proper metabolism of the body and often with disastrous results.

It naturally follows then that knowing the part a certain secretion plays in the function of the whole, that if we can diminish or increase that secretion, we can establish the proper harmonic action. In a practical way we have learned some things about these secretions—we know that the increase of the salivary secretion stimulates the flow of the gastric juice and all other digestive fluids—that the enlarging of the pituitary gland stimulates the whole involuntary muscular system and causes excessive bodily growth, especially of the bony system with resulting gigantism, acromegaly, etc.—that hyper secretion of the thyroid produces all the syndrome of Grave's Disease; the hypo secretion to myxoedema, cretinism, etc.; that enlargement of the thymus is followed by a status lymphaticus and death; that removal of the para thyroids is followed by tetany; that hyper stimulation of the adrenals acting as a vasomotor constrictor increases the blood pressure and at the same time increases the coagulability of the blood hence is a haemostatic; ovaries and testicles have a double action one of which is the so-called internal secretion.

With this basic knowledge we can proceed to act practically and the rest of the paper will deal more especially with the application of these glandular extracts in the treatment of diseases peculiar to women where our specialty has given us the most experience.

I would say here that the sexual function in the female is so intimately connected with her whole being, that the key to her cure lies largely in regulating and adapting her other functions to her sexual functions, but it requires that the other harmonic action be regulated also. In other words, we treat her as a man one-third and as a woman two-thirds. Let me here cau-

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tion you that organotherapy is a powerful and often dangerous method of treatment unless it is cautiously, and I might say scientifically administered. Many patients show a much more marked idiosyncrasy to organic than they do to Galenic drugs. In their use you must first study the case thoroughly; especially the heart, kidney and nervous system. You can easily produce a heart block and acute nephritis and mania in cases where these organs are diseased. I have found the doses usually administered are too large especially in the beginning of treatment. I would say three-fourths or one-half dose will do more good in the majority of cases than the large ones. When treatment extends over a long period they seem to have an accumulative action and for this reason breaks in the treatment for varying lengths of time are indicated.

For the want of a better way, personally, I divide patients into two great groups (analogy taken from nature positive and negative types), the positive representing the nervous active dynamic, with a tendency to hyper secretion. In this type we must proceed with great caution and feel our way. In the negative type you can proceed more boldly yet I have seen bad results in over medication. In disorders of menstruation barring frank local lesion, we are dealing with effect rather than cause. In the positive nervous type we try, first to sedate the hypertension before we attempt to correct the menstrual functions and in many cases it does; as for example a patient has passed through a great nervous shock or illness and has an excessive flow, sedate, eliminate, etc., and the functions are often restored. In these cases we find a combination of several of the glandular secretions (a shot gun prescription) will often quite restore the nervous equilibrium. In this type stimulating diet, excessive exercise, late hours, strenuous life should be avoided. In the hypertonic or negative type we can be more certain of results. In myxedematous tendencies we have been able to restore menstrual regularity by the cautious use of thyroid and ovarian in the amenorrhea and a combination of thyroid and corpus lutea in metrorrhagic cases and in low blood pressure cases adrenalin aids; in the male type, i. e., broad pelvis, scarcity of hair, etc., ova-

rian thyroid and pituitary would be indicated.

Our results while not tabulated have at least been more promising than the older methods and in some cases have been surprising. The scientific difficulties are very great, because the amount of secretion a gland gives is uncertain and must vary in each given case, therefore our dosage must be empirical and experimental.

As my paper tries to cover too much territory and is fragmentary I will close with these conclusions:

1st—Our purpose is to bring before you the possibilities of organotherapy.

2nd—Organotherapy is a rational treatment.

3rd—That a thorough physical examination is necessary before using them.

4th—That their indiscriminate use be avoided especially in maximum doses, because of untoward results.

5th—That patients so treated should be frequently seen.

6th—That we should understand their specific actions as well if not better than so-called galenic remedies.

7th—Whereas all the glands have a hormonal action as a whole the removal of one will break the continuity of their action, therefore we should be as sure as possible before removing any one of them that its function is so impaired that if it remained it would be a menace to the health (this by the way is the real rub) and this is the problem of the surgeon. It is no longer a question with a competent surgeon as to how to operate but what to do and especially what not to do. This problem is to me more acute today than ever before as I grow older and I hope more mature in judgment.

8th—And if you will pardon a personal conclusion I am beginning to reap from the sowing of my early surgical zeal, before I understood this hormonal gland action, in patients whose dynamic machine does not work in harmony. I have one great consolation—I am not like the dying soldier of Algiers alone.

There is but one straight road to success—that is merit. The man who is successful is the man who is useful. Capacity never lacks opportunity. It cannot remain undiscovered, because it is sought by too many anxious to use it.—Burke Cochran.

THE FOUNDATION OF AMERICAN CIVILIZATION UNDERMINED.

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The signs of the decline of the Roman Empire and in fact every nation's decay were accumulation of wealth in the hands of a few, hoarding of food, industrial unrest, lack of housing, deserting the farms, an increase in prostitution and a general decline in public morals. It is not my purpose to deal with the economic side of this question. The last economic symptom of national decay generally is recognized by historians in the congestion of the cities with rural population followed by increased prostitution. Our Census Bureau announced last Tuesday that more than one-fifth of the population of the country is located in thirty-three leading cities having 200,000 or more inhabitants. For these thirty-three cities a combined population of 22,724,565 is returned. This being the case, the question naturally occurs to us, are we using scientific methods at present to prevent the increase of prostitution—the germ of national decay. The mere study of the question from the angle of a few moral perverts who sell their bodies, due to enforced economic conditions, who are capable of reformation, does not meet the issue which is vital; namely, the vast majority who are physically impossible of reformation whose number are being constantly increased by the effect of economic conditions upon their physical welfare.

The subject of sexual perversion, although a disagreeable one for discussion, demands the attention at present of every patriotic, scientific physician, and is of great importance in its social, medical and legal relations. "The mightiest of human instincts" is too intimately related to the physical basis of human weal and woe for any physician prudishly to ignore any of its phases. The unfortunate class of individuals who are characterized by perverted sexuality have been viewed in the light of their moral responsibility rather than as victims of a physical, and incidentally of a mental defect, neuro-psychic degeneration.

The profession must enter strenuous objections to the consideration of this almost universally misunderstood sub-

ject by the layman from a political and esthetic standpoint instead of a scientific and moral point of view. The State has treated the question in the past and at present in an unscientific manner and is creating menace which if not checked will lead to its doom as similar nations in the past.

It is an accepted fact that maldevelopment or arrested development and the more nearly the individual approximates the type of fatal development which exists prior to the commencement of sexual differentiation, the more marked is the aberrance of sexuality. Therefore to expect that the unfortunate woman with uncontrollable desire is going to respect any legal restriction, however severe the punishment and be governed by moral persuasion is ridiculous. Nineteen years practice in Southern States, Central and South America and the West has proven to me that the mongrel is especially prone to prostitution. Yet, we have allowed our country to be flooded with this sort of "cheap labor" and the press tell us of thousands more to come to our shores. Are we doing our duty? If it were not for a cost system based upon blood, more anarchy than now exists in Central and South America would exist. In certain sections of our country today, the railroad stations are placarded with signs concerning races not allowed in their localities.

So long as motherhood is not protected by the State, the mother compelled to endure conditions which offset her offspring, over-worked, improper poor food, etc., so long will the State reap a reward in malformations, crimes, and increased prostitution until anarchy exists.

So long as the diseased prostitute is allowed to roam at large without being registered, tagged and medically inspected and controlled, we can expect the same results as a typhoid carrier unreported. The very basis of sanitary laws requires that the physician should know primarily the location and person affected with a communicable disease. Our European conferees have studied the question for hundreds of years and Holland has evolved the best laws as far as results are concerned. The prostitute is required to wear a badge continually as it is a recognized fact that moral reformation of a genuine unfortunate is a physical impossibility,

and the Bible so informs us, while science has explained the justice of the Great Physician. 1 Epistles Paul to the Romans, Chap. 1, vrs. 24, 26, 27 and 28). "Wherefore God also gave them up to uncleanness," etc. Doctor, if you love your country, insist that propaganda and esthetic efforts shall cease and only scientific management of this vital condition be enforced. Do not allow a class of political sociologists to make a farce out of what should be a scientifically managed affair.

ESSENTIAL HYPERTENSION — REPORT OF A CASE.

Dr. D. Heath Nisbet, Charlotte, N. C.

Almost invariably when a case comes in with high blood pressure we think of chronic nephritis and arteriosclerosis as this has been our teaching for the past generation. But lately, or in the last few years, observant clinicians, as Janeway, of New York, and Sir Clifford Allbutt of London, have been instrumental in recognizing another group. They found that certain cases did not fit in with chronic nephritis or with arteriosclerosis, but showed characteristics entirely different from either. These cases have been called by various names as Essential Hypertension, Benign, Essential Hypertension, Chronic Hypertensive Cardiovascular Disease (Janeway), Hyperpiesia (Allbutt)—the latter has been defined as a state, condition or disease, whose essential feature is elevated blood pressure. Its cause is not known, but Janeway puts forward very convincingly theory that it is due to some damage to the regulating power of the visceral circulation and that high blood pressure cannot be maintained without hypertrophy of the left ventricle. While Hasenfeld and Hirsch have conclusively proven that arteriosclerosis leads to a hypertrophy of the left ventricle only when the splanchnic circulation or the aorta above the diaphragm are highly diseased.

The end results of these cases are cardiac failure and arterial accident cerebral or coronary in most cases and the patients rarely, if ever, die of uremia. It is seeing the cases after the heart has begun to go bad or when

a little albumen or a few hyaline casts are found in the urine that we make our mistakes in diagnosis.

As to the differential points. The course is slow in hyperpiesia, much more hurried and malignant in Brights. Uremia is not seen at all or but rarely in hyperpiesia, but it is the characteristic episode in Brights. Albuminuric retinitis occurs in Brights and not in hyperpiesia—finally test of renal functions determine a decompensation in Brights and a practically unimpaired function in hyperpiesia. According to Meara, of Cornell, absence of uremic symptoms and retinitis, with normal functional tests should strongly favor hyperpiesia.

As to urine analysis and blood analysis I will cite a few findings. In 50 cases analyzed by Meara the specific gravity ranged from 1011 to 1030 in 80 per cent of the cases, while 6 per cent were 1010 or under. Albumen was absent in 1-3, a faint trace was found in 1-3 and a heavy trace in the other 1-3; this due to secondary passive congestion of the kidney. Casts, practically always Hyaline, absent in 38 per cent; a few were found in 38 per cent, many in 10 per cent. The Phthalein output ranged 65 to 80% in 65 per cent of the cases. Urea nitrogen was normal or debatable in 77 per cent. The non-protein nitrogen showed considerable retention in 25 per cent of the cases, while 75 per cent were normal (35 to 45 mg.) Creatinin 68 per cent normal (3 mg.); 31 per cent—3 to 8 mg. Thus we see the Phthalein output is depressed to a greater degree, than the Metabolites are retained, as would be expected in passive congestion.

Dr. Meara has had 250 cases so far and says not one has died of Uremia, the clinical picture is not that of Brights, the renal decompensation has not been of marked degree, and when treatment was directed toward improvement of the circulation and functional rest, the improvement has been beyond anything he has seen in Brights.

Treatment.

Rest in bed—the length of time depends on the case. Diet—exclude alcohol and rich sugary foods—decrease meat and salt to a minimum. The bowels should be kept open to prevent fermentation and putrefaction.

Habits and Exercise.

These cases go to pieces rapidly if they are divorced from business at once; they should be told to make life less strenuous, shorten their business hours, lengthen their holidays and take them more frequently. Exercise is important and as soon as indicated, they should take up walking, golf or some other light exercise.

Treatment of Hyperpiesis.—Nitrites should be used when symptoms indicate the pressure is getting too high, but should be discontinued if a violent headache ensues and the pressure should not be brought down below that at which the patient feels best, no matter how high the figures show. The high frequency current has been used to good advantage in the hands of many men. Venesection also has shown good results in some cases.

Case Report.

Mrs. X., age 25, married 7 years, one child.

Family History: Father died 66, following stroke of paralysis; one sister died at 19, chronic nephritis, following a miscarriage; one brother died at 35, high blood pressure, was found dead in bed, with blood flowing from ears and nose. There was no evidence of violence. Mother and four brothers living and well.

Past History: Up to 7 years ago was in perfect health, but during pregnancy had considerable edema, while albumen was found in urine, but no casts. Her baby was born normally and the patient began to gain weight rapidly, going from 100 to 150 pounds in a few months; she was given thyroid extract, which she thinks did not agree with her and caused some shortness of breath. Four years ago had some menstrual disorders, associated with severe occipital headaches. At this time had heart rate of 90 to 140, with some shortness of breath, which she attributed to her weight. Blood pressure was 135-80; urine was examined many times, being always of low gravity, albumen present, but no casts. Two years ago physical examination negative. Stool negative. Free Hce Zero X-Ray showed a flabby atonic stomach, requiring 9 hours to empty, remainder of gastro intestinal tract negative. After 2 weeks treatment in hospital returned home improved.

Present Illness: In June, 1920, had an attack of a severe headache with nausea and vomiting and was very nervous; she vomited some blood and stool also contained fresh blood; this continued at intervals for 6 weeks, when she was brought to Charlotte. She was examined by Dr. Crowell, who on finding a large amount of albumen in urine, with a blood pressure of 255, referred her as a medical case. On physical examination the skin was very pale and pasty, looked anaemic and showed discolorations where hypodermics had been given. Pupils were dilated equal and regular, re-acted slightly to accommodation, but not to light. Vision very poor, right lateral nystagmus both eyes. Nose, ears and throat negative. Lungs clear; heart showed considerable enlargement 5 C. M. to the right of the midsternal line and 3 C. M. to the left of the nipple line; sounds were clear, regular; soft blowing systolic at the base, A2 accentuated. Arteries were soft, but under high tension. Pulse rate 90 and regular; abdomen entirely negative. Reflexes, knee jerks were sluggish, but equal.

Special Examination: Ophthalmoscopic showed practically complete detachment of retinae both sides, due to hemorrhage; no exudate to indicate albumenuric retinitis. The vision was poor, could see on the inner side of the left and outer side of the right eye.

Pelvic Examination: A large boggy uterus with blood flowing from the external os, no evidence of other pathology.

Kidney: Catheterized specimens of both kidneys showed bloody urine, with a heavy trace of albumen, but no casts. On four examinations of the urine the specific gravity was around 1010, albumen heavy trace, sugar none, no casts. No functional tests were made.

Blood: W. B. C. 11000 to 15400. R. B. C. 2,808,000, no change in size or shape, hemoglobin 75. Blood Wassermann negative.

Blood Pressure: July 10th 275-165. By the use of hot packs twice a day and restricted fluid, it was reduced to 210-130 by the end of a week. The patient was feeling very weak and the hot packs were discontinued; the next day the pressure went back to 225 and remained at that level.

During the first week in the hospital temperature ranged from 99 to 100,

later becoming normal. Pulse at all times 90 to 120, but regular. Respiration 18 to 20. In spite of all treatment the bleeding continued and the patient was allowed to go home; after four days the hemorrhage from the kidney stopped and she began to pass large amounts of pus. She refused her food and died five days later, following large hemorrhages from the stomach and bowels.

The outstanding features of this case are: the youth of the patient, the long standing albuminuria, without ever any casts, the malignancy of the hypertension with numerous hemorrhages, the hypertrophy of the heart with I consider secondary to the hypertension, the rapid pulse at all times, even with rest in bed.

This case is presented as one closely resembling essential hypertension, but cannot be diagnosed absolutely as such on account of the absence of the functional kidney tests, but we have the following facts in favor of essential hypertension: While the urine has always been of low gravity, with albumen, no casts have been found. With such a high pressure and the degree of kidney involvement, which would have been necessary to cause such a pressure, we would surely expect a uremic death. The absence of albuminuric retinitis is against primary kidney disease.

1. Medical Clinics No. Amer., July, 1918. Hyperpiesia of Clifford Allbutt. (Essential Hypertension) Pa. 1.

2. The Clinical Study of Blood Pressure, Janeway, P. 141-142.

*PRURITUS ANI.

Dr. R. Z. Linney, Charlotte, N. C.

Pruritus Ani is one of the most common and least known pathological conditions with which we have to deal today. Most every authority gives a different etiology, some claiming it the result of focal infection, neuresthenic conditions, eczema, diabetes or most anything from a lesion of the spinal cord to a stricture of the urethra.

It is true there may be a local pruritus caused by thread worms or some disturbance of the alimentary canal, but

Pruritus Ani Essentialis is a disease of its own and local treatment applied in the proper way will give us the only permanent result.

In all true cases we find the predominating symptoms of thickening of the skin, and a distinct redness extending over the affected parts in the early stages but as the disease progresses the tissues lost this color and assume that peculiar white glistening appearance which is so familiar to the men who are following up this line of work.

In the early stages of this disease it is hard to tell if we are dealing with a true Pruritus Ani or some transient condition. Under these conditions of doubt it has been my custom to treat locally or I should say topically until I can make a positive diagnosis. However, this is seldom met as we rarely see a case unless it has existed for some time and then all the typical symptoms are there.

Most of the old theories have been discarded and we are now looking for the isolation of some special bacteria which causes the disease.

Murray has attracted some attention from the fact that he has been able to isolate the *Bacillus Foecalis* in about all his cases. This has been followed up with others who have met with the same results. Just what this will lead to, I am at this time unable to say.

But I do believe it is the opinion of most proctologists that Murray is on the right track and will eventually find a specific in the development of his bacterin.

However, while we are waiting for something better to develop we must take care of these cases and this can best be done by returning the local pathological condition to a normal state.

Dr. Terrell in a recent article on this diseases comes right along with the belief that it is caused by an infection of the rectal pockets which in the diseased condition allows the infection to extend down under the skin surface below the ano-rectal junction.

While this infection remains above nerve filaments but as soon as the infection reaches the skin border trouble develops at once.

If we will be careful in our questions of the patient we can usually get a history of a disturbance of the rectum

*Read before the Seventh District Medical Society meeting, October 4-5, 1920, Lincolnton, N. C.

prior to the first attack of itching and the other symptoms which develop later.

This would indicate that the disease does originate higher in the rectum and then extend to the skin border and later below.

My attention was first called to this condition several years ago by an article written by Jamison and it seemed so logical I followed up his theory and since that time I have become fully convinced that the principals of that article are right.

Jamison claimed at that time he was able to locate channels extending from the lower bowel down under the mucocutaneous junction and out under the skin and by locating these channels and draining them we got a result that no other line of treatment would give. Locating these channels is no easy proposition but after repeated efforts one can find even reservoirs of mucus dammed up under the mucus membrane and skin, and I have been able in a few cases to follow these channels up the rectum under the mucus membrane for several inches. It has been claimed that this is only normal space under the membrane but if the condition is normal they simply cannot be found.

The treatment is, simply locate your channels and drain them. When I say DRAIN I mean all that word implies. Make your incisions deep and long, follow up all open space and pack it well and then go after the next and pack it well. Leave this drainage, or really packing, at first, for two days with the bowels confined and then move the bowels and remove your drainage and irrigate each channel thoroughly with your favorite antiseptic but be sure that your drainage is good. Follow this up each day for at least one week and then your patient can take care of himself. Keep them up and about all the time. I do this work under local anesthesia.

Now this seems a great deal of trouble but any patient who has Pruritus Ani will be glad to keep up his part of the treatment. However, it is folly for one to try to do this work unless he is able to give the case his own personal attention, for unless you do carry out this treatment to the most minute part you had better leave them alone.

While this line of treatment has been followed for some years, with slight

changes, I have not neglected to try out some other methods which were promising. I used Murray's vaccine as directed, that is, the autogenous, but I was never able to get any results whatever. I carried out an extensive experiment for Parke, Davis & Co., with a stock vaccine, but my results were not satisfactory. In each instance I told my patients just what I was doing and they took the treatment, in fact, a man who has been scratching for several years will try most anything but it is always the operation last. However, when it is explained just how easy they can have the operation this main objection is eliminated.

As to ointments and salves, there is nothing to any of them except palliative and a good strong phenol ointment in a hard base will do as much good as anything you can use.

In recent years I have been taking note of the infectious nature of this disease. My attention was first called to this by the fact that often two or even three members of one family would take treatment, and I have made it a rule to always ask about this. In one instance a man came to me from Hickory, N. C., and I was told that several of his friends who loafed around one of the drug stores in that town had the same trouble. They congregate around the warm stove in the winter time and use the same chairs and this would be a good place to scatter some of Murray's *Bacillus Faecalis*.

It is rather hard for me to believe Dr. Terrell is exactly right about the rectal pockets, for I have been unable to find them at all in some of my cases who have had severe forms of pruritus but as he is getting so near to what I think is the real etiological factor in this condition I want to commend him in the highest terms for his work along this line.

Case 1—A. H. N.—A young man of good family connections and good history reported to me with about as bad a case of Pruritus as I have ever seen.

As there was a decided ulcerative proctitis, it looked as if this was the cause of all the external trouble. Under topical treatment the proctitis cleared up but the Pruritus continued. Patient was miserable all the time and could sleep but little at night.

I made four deep incisions extending

from the anal outlet to two inches in the skin. Under the entire surface I found a low grade inflammation with all the subcutaneous tissues saturated with mucus. The anterior incision opened directly into a mucus channel which extended up the rectal wall for three or four inches. Now this was not just loose tissue but a distinct separation of the membrane and all this space was filled with mucus. All the parts were drained well and the dressing was removed on the third day thoroughly saturated with amber colored mucus. This discharge continued for over a week with daily dressings and a complete cessation of all local trouble, and complete recovery.

Not only the peri-anal tissue was involved in this case but it extended out over the scrotum and buttocks.

This young man had Balls operation and most everything else done from Hopkins to Atlanta.

Case 2—J. W. B.—Contractor came to me four years ago with an aggravated case of Pruritus Ani. Parts opened up thoroughly and drained as above case. Complete recovery. In this case the Pruritus extended back over the entire sacral region and the patient was much lowered in health from suffering and loss of sleep. Gained thirty pounds in less than a month after recovery.

I could go right along and report cases all night but as the above two are representative of what we have to meet I will not take up any more of your time with them.

Gentlemen, it would be fallacy for me to say I cure all cases of Pruritus Ani that I treat but in every instance I have found a great improvement from the beginning and in each case that has not received complete relief I well know that I did not reach all the channels that existed in the case. In a few instances I have gone back and opened up other places with the remaining trouble disappearing at once.

In Balls operation and all its modifications I am sure the source of relief comes from the fact that some of these channels have been opened and drained in spite of immediate suturing which is often done, and I would like to say right here, keep your sutures out of your rectal work, it matters not much what you are doing. It is so seldom that a suture will help matters at all

that I rarely ever use them for anything I do about the rectum. They cause pain, they cause infection, they retard recovery and I will further say this; just why I seldom take a patient to the hospital and confine them is simply because I leave out the sutures.

We are all too much alarmed about hemorrhage in rectal work. Well, if you get too much hemorrhage simply take up the bleeding vessel and ligate it but never take in a large amount of rectal tissue with the vessel, for as sure as you do this patient will tell every friend he has to stay away from rectal operations. This suture business has done more to keep good work from the hands of men who are trying to do something in this special line but the time is coming, if it is not already here, that your patient will not tolerate the old obsolete methods used by medical men from time immemorial for the cure of rectal diseases, but demand that he should be cured by a humane treatment and yet a safe one.

BLOOD TRANSFUSION.

James W. Davis, M. D., Statesville, N. C.

Until recent years the transfusion of blood has been regarded as a therapeutic measure only to be used as a means of last resort. This was due to the great difficulty of actually transferring the blood from the donor to the patient and to the bad results that sometimes followed a transfusion.

It is now known that these unfortunate results were due to the blood of the patient causing an agglutination or clumping of the corpuscles of the transfused blood with perhaps hemolysis and other changes, causing a severe reaction which only made the patient worse.

The blood of every person falls into one of four groups termed Groups I, II, III and IV, according to whether the serum of one group agglutinates or does not agglutinate the corpuscles of the other groups. Approximately 10 per cent of all people are Group I, 40 per cent Group II, 7 per cent Group III and 43 per cent Group IV.

Certain of these groups are compatible and others are not. Now, however,

*Read before the Ninth District Medical Society at Mooresville, N. C., October 12, 1920.

by simple preliminary tests we can select a suitable donor for any patient, a transfusion of blood from whom will not produce any dangerous reaction but will give the best possible results.

Group I patients can be transfused with the blood of any group for the serum of this group will not agglutinate the corpuscles of the other groups. Group II is compatible only with Groups II and IV. Group III with III and IV. A Group IV patient can only be transfused with Group IV blood but on the other hand the blood of a Group IV donor may be given to any group, hence the term "universal donor."

The more common conditions for which transfusion is indicated are:

(1) Hemorrhage, sudden, with the typical clinical symptoms of the loss of blood.

(2) Gradual loss of blood from any cause such as oozing after surgical operations or in hemophilia where the elements required for clotting are not present.

(3) Shock.

(4) Certain septic conditions.

(5) Pernicious anemia.

(6) Malignancy.

Sudden massive hemorrhage from any cause whatever, even if not sufficient to produce fatal results, may if the blood lost is not partly replaced, produce an anemia of the brain resulting in permanent degenerative changes in some of the cells. This type of case is seen so frequently after accidents associated with injuries to the larger arteries, post-partum hemorrhage and the hemorrhage from a ruptured ectopic pregnancy. In these cases a transfusion of blood will produce almost magical results.

In weakness and anemia from persistent oozing of blood or from bleeding incident to hemophilia, a transfusion will often stop the bleeding by the introduction of the elements necessary to clotting and at the same time replace a good part of the blood lost.

In certain septic conditions where the patient is weak anemic and toxic a transfusion will often be of great assistance in overcoming the infection. Where surgical procedures are necessary in these cases a transfusion may be given just before or immediately after the operation to tide the patient

over the period of depression and shock.

In gunshot and shrapnel wounds associated with the loss of blood, laceration of tissues, bone injuries and the consequent shock, blood transfusion was used whenever possible by the surgeons of the American and Allied Armies in France during the recent war. It was here that the immense value of blood transfusion was so vividly demonstrated. Often, soldiers with a severe wound of the leg or of some other part of the body with more or less extensive bone injury, weak from the loss of blood and shock, were transported from the trenches back to an advanced hospital, arriving sometimes after an unavoidable delay of many hours, in a condition of profound depression and shock and frequently delirium. Whenever possible in such cases a transfusion was given at once. The pulse would slow down, the volume improved and the mental condition usually cleared up and the subsequent treatment was far more successful. No one who has been through this will ever forget the value of transfusion in such conditions.

Pernicious anemia is sometimes apparently relieved for a time by repeated transfusions. Though perhaps not curative the patient is made comfortable and life prolonged in a good percentage of cases.

With the newer method of collecting blood by means of a large needle, the donors do not mind it at all, as there is very little pain, no mutilation of tissues and no resultant scar. The average adult can spare a pint of blood without experiencing any bad after effects.

By the preliminary typing or grouping of a number of suitable donors who are always available we can have at hand at all times a donor whose blood will be compatible with that of any patient. In addition, all donors have a Wassermann test of the blood which eliminates the chances of transmitting this disease to the patient.

The citrate method, which is the simplest, safest and most practical of all the means devised for blood transfusion, together with the accurate preliminary tests whereby suitable donors can be selected, has made it possible to do transfusions easily and rapidly and at a time when the patient is in the greatest need of this aid to tide him over a period when without this assist-

ance a mortality might result instead of a recovery.

REPORT OF CLINICAL CASES.

Dr. O. J. Houser, of Charlotte.

Albuminuric Retinitis.

Case No. 1. Woman age 35. Had good health up until present pregnancy.

She was delivered by forceps while having convulsions. The urin showed great amounts of Albumin. Vision almost gone. A few days later the eye grounds examined showed swelling around the disc, vessels swollen and tortuous, with white spots around the macula and disc.

She was put on salt free diet, Sodium Bicarb. $7\frac{1}{2}$ grains dissolved in 40 C. C. H₂O. Intravenously, one dose.

I prescribed colored glasses along with the diets, and drugs to combat symptoms as they arose. At the end of six months' time she was able to read headlines on newspaper.

At this time amber lenses were prescribed, which seems to give her eyes more comfort. Her eyes one month later excepted a plus .75 sphere combined with an amber tint which gave her newspaper reading with comfort.

She has for the last three years enjoyed good health, with fair vision.

Syphilitic Gummta Germata of Palats.

2. Woman age 49. P. H. Had been healthy all her life so far as she knew.

P. C. had sore throat which had been treated by a specialist 15 days prior to her visit to my office.

Examination revealed a massive looking ulcer situated on and behind the soft palate at the base of the Uvula. The discharge was thick glueish looking with a yellow color.

Three days' treatment showed no improvement. A Wasserman was made which was 4 plus. She was immediately given 606, the condition disappearing at the end of 18 days.

Haemoliptic Streptococcus Infection of the Throat.

Case 3. Man age 38. Weight 180. P. C. Complained of having soar throat. Examination showed an elongated ulced on each tonsil, with history that both tonsils became sore at the same time.

sils became sore at the same time.

The cervical glands enlarged but no enlargement of glands at angle of jaw. Tem. 101.4. He was given the regular treatment such as sprays and mopped with silver nitrate Sol. He returned next morning complaining with a great deal of pain and swelling. Tem. 102. Tonsils most covered with whitish membrane. Specimen was taken; laboratory test showed Haemoleptic Streptococci.

Seen in the afternoon same day the membrane had spread over soft palate and on sides of uvual. The large part of membrane was removed with little bleeding.

Third day membrane was still thicker with a great deal of swelling and pain. I gave him a 20 per cent Sol. of Argylol with instructions to mop every two hours.

Fourth day, no improvement seen. I discontinued all treatments except a mop of 1% Sol. Mercurochrome 220 every two hours. Seen on the morning of the fifth day, throat had very small amount of membrane, no pain and very little swelling.

Patient left the city in the afternoon of fifth day.

Hypertrophied Tonsils Causes Death.

Case 4. Child 8 years old. Convalescing of pneumonia as a complication of whooping cough, developed tonsilitis, with a complication of otitis Media. I saw him on the second day after the onset of Otitis Media, and did a double parescentisis. Found a large amount of puss under pressure, the child looked very toxic and died on the following day.

Bronchial Pneumonia as Complication of Infection of Tonsils.

Case 5. Child age 2 years. Had poor health for last year, frequently having high fever and spasms. I was called in. Mother stated the child had been pulling at his ears and crying. Examination of ears showed some congestion of ear drums, but not bulging.

Examination of the throat revealed a follicular tonsilitis.

The tonsils and ears were treated next morning, throat looked very clean, ears had cleared up considerably. On the following day I was called back. Mother stated the child was very restless with anxious look on face. Respirations fast with a grunting sound at the end of each expiration. Tem. 102.

*Read before the Seventh District Medical Society meeting, October 4-5, 1920, Lincolnton, N. C.

Dr. Allen, of Charlotte, was called in and found it to be a case of bronchial pneumonia, very small spots. The child recovered without any further complications. I removed the tonsils one month later. It has been about seven months and the child is now in a state of excellent health.

Optic Atrophy With Anterior Synechia as Complications of Tertiary Syphilis.

6. Negro age 48. Occupation, R. R. Weight 200. P. H. Had syphilis six years ago, with complete paraplegia; after taking treatment regained motion of limbs enough to return to work. P. C. Complained of poor vision. Exam. Irs dull pupil contracted. A 2 per cent Sol. of atropin was installed giving very little Mydriasis, owing to adhesions of the pillows.

The Ophthalmic examination showed both disc white except one sixth of the nasal sides. The blood vessels entirely displaced by fibrous tissue.

Distant test showed finger perception at 12 inches, light perception 15 ft. O. U. He was put back on Syphilitic treatment for five months, at the end of which time no change could be noticed in either disc.

Case of Hypertrophed Adheared Tonsils Infected by Abscess of Wisdom Tooth.

Case 7. Lady age 25. P. M. Patient had in past one attack of tonsillitis, which produced adhesions between the left tonsil and anterior pillow.

P. C. I saw her with the dentist five days after he had extracted the abscessed tooth. On examination found that the infection had migrated back between the anterior pillow and tonsil, giving her a peritonsillar abscess. A fistulae had been formed from the tooth fossae into the tonsil fossae. The amount of puss drained was about one-half an ounce when lanced. The patient looked very much emaciated and was in serious condition for several days. This was a simple case of Hypertrophed tonsils with adhesions of the pillow, which had given her no trouble at all until agitated by this near pathological condition.

If you're "there," you'll be discovered sooner or later.

If you are really a superior doctor, you don't need to talk about it. The results will speak for themselves.

My Baby's Eyes.

I am a dreamer, as you can see,
And I dream of the blessings that come
to me,
Of the love that lingers around my
home,
Of the pleasures for me on the sun-
beam's borne,
Of the children whose laughter to me is
bliss
As the soft summer breezes their red
lips kiss.
And my dreams come true, to my sweet
surprise,
For I live in the love of my baby's eyes.

I have seen the world, and its wond-
rous ways,
Its joys and sorrows, its labors and
plays.
On the ocean waves, as they ebb and
flow
I have laughed and frolicked, from
shore to shore,
In the cavern deep, on the mountain
top

I have hunted for joy and found it not.
But a blissful rest in my heart now lies,
For I live in the love of my baby's eyes.

I have gathered treasures of jewels
bright,
Till my youth was gone, and my dreams
took flight.
From passion's cup I have sipped the
wine,
And dreamed that happiness then was
mine,

But none of the joys were near like this,
The trusting arms and the baby kiss.
There is no joy beneath the skies
Like the love that dwells in my baby's
eyes.

JOSEPH W. ROGERS, M. D.

Nature never hurries; atom by atom,
little by little she achieves her work.
The lesson one learns in fishing, yacht-
ing, hunting, or planting is the manner
of Nature's patience with the delays of
wind and sun, delays of the seasons, bad
weather, excess or lack of water—pa-
tience and the slowness of our feet,
with the parsimony of our strength,
with the largeness of sea and land we
must traverse.—Emerson.

There are more men ennobled by
study than by nature.—Cicero.

COIN TEST IN BRONCHIECTASIS. (transmitting medium, such as bron-

Samuel Lowenberg, in the New York Medical Journal, points out that bronchiectasis is, practically speaking, a dilated end of bronchus. The dilation may be large or small, cylindrical or sacculated. No matter what its size and shape, it is a continuation of a bronchus, and, therefore, in direct communication with the trachea. When a bronchiectasis is free from secretion, it gives rise to a tympanitic percussion sound. When several bronchiectatic cavities exist in close proximity and communicate with one another indirectly, a cracked pot sound is often elicited. However, similar signs are obtainable over pulmonary cavities.

The fact that a bronchiectatic cavity may give rise to tympany when free from secretion, and to dullness when filled, is a strong diagnostic point in the differentiation between it and a pulmonary cavity. But often a diagnosis is required before such change can be demonstrated. I employ the coin percussion test which is generally used to demonstrate a pneumothorax for determining the presence of a bronchiectasis.

Technic.

A silver coin is placed flat over the suspected area and is tapped with the edge of another coin by an assistant, the examiner listens with the stethoscope or unaided ear to the open mouth of the patient. The presence of a bronchiectasis is evidenced by a loud metallic sound, which gives the impression of nearness. The metallic sound produced by striking one coin upon another is somewhat intensified by the bronchiectatic cavity. This intensified sound is transmitted through its direct opening to the listener's ear. This sign is absent in other pulmonary cavities, unless they are situated at the apex of the lung and communicate with a large bronchus through a very large opening.

This sign can be checked up by reversing the position of the coins and the listener; thus, a coin is placed over the upper end of the trachea (immediately below the cricoid cartilage) and is tapped continuously by an assistant with the edge of another coin, the examiner listens carefully over various parts of the chest. The portion of the chest which transmits the metallic sound the loudest, indicates a direct

transmitting medium, such as bronchiectasis or a cavity communicating directly through a large opening with a bronchus. It should be emphasized that the intensified note elicited by the coin percussion test over a bronchiectatic cavity has not that clear metallic ringing note which is elicited over a pneumothorax. The intensity of the note is greater, the quality being but slightly altered.

Campaign Against Narcotic Drugs in

Canada.—Federal health authorities of the Dominion of Canada announce gratifying results in the campaign being waged against the drug evil. Dr. J. A. Amyot, assistant medical director of the Department of Health, who has just returned to Montreal from an extended trip across the country, states that there has been a falling off in the number of drug addicts. Several attempts to form opium rings have been thwarted, and it is intended to put into force early in the autumn the opium and narcotic drug act passed at the last session of the Canadian Parliament. Under this act wholesale druggists, manufacturers or dealers, are required to obtain a license to deal in these drugs; for this an annual fee is charged. All retail druggists who manufacture narcotic drugs or preparations containing the same are required to obtain a license; all druggists, other than those who manufacture, and all physicians, veterinary surgeons, and dentists are required to make a declaration that they are engaged in the sale or distribution of these drugs. It is also required that all druggists, whether wholesale or retail, and all manufacturers, keep a record of their receipts, together with a record of the quantity manufactured, and a record of their sales. Such records must be kept, in prescribed form, in a special book for the purpose.—Medical Record.

It is a great folly not to part with your own faults, which is possible, but to try instead to escape from other people's faults, which is impossible.—Marcus Aurelius.

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of the Estate of the late Dr. Register

CHARLOTTE, N. C.

"Read not to contradict and confute, nor to believe and take for granted, nor to find talk and discourse, but to weigh and consider."—Francis Bacon.

GOVERNOR'S ADVISORY BOARD ON CRIMINAL MENTAL HYGIENE.

Governor Davis of Virginia has just taken another most important step forward in the appointing of a Board with the above title whose purpose shall be to make a study of mental conditions prevailing among the prisoners of the State Penitentiary, as a basis for educational and occupational work.

This step by Governor Davis is certainly an expression of his opinion that criminality may be, occasionally at least, a manifestation of mental unsoundness and that mental disorder amongst criminals deserves attention and treatment.

No normal individual—whose physical and mental processes are tuned in harmony with nature's laws is a menace to himself or his community. A normal man cannot be a criminal and if he is a criminal there is or has been something wrong somewhere, sometime. His criminal tendencies may be the penalty of abnormal ancestry and an inherited physical degeneracy. It may be the result of his own youthful training and environment. Whatever may have been the cause the criminal deserves the protection and scientific help of the State. If his condition is the result of remediable physical defects the cause should be ascertained and the remedy applied. If the result of faulty training and improper environment he should be re-educated to a life of usefulness. If proper and thorough study and investigation proves beyond doubt that the condition is ab-

solutely irremediable then a proper home should be provided where his continued existence can not be a menace to society or himself.

Mental defectives present every shade and color of abnormality and their proper classification is only possible for men who have devoted intense study to the subject and have had a vast experience.

If a mental defective presents an abnormality such as makes him a menace to society or himself then the custom of the ages calls his abnormality crime, a jury brands him a criminal and a court fixes a penalty he must pay.

Governor Davis has caught a vision which is filtering through the misty haze and ignorance of former times. A vision of sick men, whose unfortunate sickness makes them unsafe, receiving a square and honest deal.

We hope the Governor of North Carolina as well as the Governors of all other States will follow this example and appoint a board whose qualifications will enable them to diagnose the mental condition of all mental defectives that have been and still are called criminals.

Personnel of board appointed September 7, 1920:

Dr. Beverley R. Tucker, Chairman, Richmond, Va. Medical College of Virginia, Richmond; Tucker Sanatorium, Richmond.

Dr. James K. Hall, Richmond, Va. Westbrook Sanatorium, Richmond.

Dr. K. J. Hoke, Williamsburg, Va. College of William and Mary in Virginia, Williamsburg.

Dr. Donald A. Davis, Williamsburg, Va. College of William and Mary in Virginia, Williamsburg.

Hon. James Hoge Ricks, Richmond, Va. Justice, Juvenile and Domestic Relations Court, Richmond.

Dr. William F. Drewry, Petersburg, Va. Supt., Central State Hospital, Petersburg.

Dr. E. H. Henderson, Marion Va. Supt., Southwestern State Hospital, Marion.

Dr. George A. Wright, Marion, Va. First Assistant Physician, Southwestern State Hospital, Marion.

Dr. G. W. Brown, Williamsburg, Va. Supt., Eastern State Hospital, Williamsburg.

Dr. J. S. DeJarnette, Staunton, Va. Supt., Western State Hospital, Staunton.

Dr. A. S. Priddy, Colony, Va. Supt., State Colony for Epileptics and the Feeble-minded, near Lynchburg.

Mr. Harvey D. Goghil, Secretary, Richmond, Va.

THE HALL OF FAME—THE "AMERICAN PANTHEON."

Represented by the Hall of Fame in New York contains the names of 56 persons whose life activity entitles them to recognition, in this way, as important factors in the evolution of the nation and benefactors of the human race.

It is strange that in this list of great Americans there is not as yet one single representative of the Medical Profession as such.

In the dim distance of earliest recorded history we find in Egypt, 4,000 years B. C., the records of a doctor, I-em-Hetep, who lived in the reign of King Tasher of the Third Dynasty. Proof of the great respect and the extent of the Egyptian's admiration for this "Master of Secretes," this "Bringer of Peace" is the fact that the step-pyramid at Sakkara was built in his honor. This was one of the very earliest of the pyramids and the greatest monument the nation could build to honor any man.

Everything is relative. We say this or that fellow is a great man because we measure him by those about him, just as we say this or that building is big and tall as compared with those about it. I-em-Hetep must have been considered great—he must have stood head and shoulders above all others in his own and all other professions—because this wonderful pyramid erected in his honor was the expression of the people to this effect. In Egypt's "Pantheon" no king, statesman, lawyer or poet stands above that of this physician.

We are wondering if the medical profession is keeping abreast of the advances in other lines of endeavor when already in the American Pantheon fifty-six names have been accorded a place with no physician in the list.

Perhaps the first impulse would be to say I-em-Hetep had no such co-

petition as is everywhere today. But this will not do for "everything is relative" is axiomatic. He was measured by the standards of his time as men to-day are measured by present standards, so if it was lack of competition then that is admitting that the medical profession has allowed itself to drop behind—and this we won't admit.

We prefer to say as did Oliver Wendell Holmes that "Fame usually comes to those who are thinking about something else."

The medical profession has been so absorbed in the noble and altruistic work before it that it has neglected to claim and demand the recognition it deserves. Will we, because of modesty, allow the records on the tablets of time to show six thousand years from now, that fifty-six (or more) persons stand ahead of any doctor in relative importance, when 6,000 years ago the name of a doctor stands first. Twenty years ago—in 1900—a gift of \$100,000 to New York University made possible the building of a colonade on University Heights overlooking the Palisades and the Hudson and Harlem River valleys, the exclusive use of the colonade and its substructure to serve perpetually as the Hall of Fame for Great Americans. One hundred and fifty panels are provided for memorial bronze tablets, each to contain the name of some American. Every five years five names are to be chosen (fifty were to have been chosen in 1900) so as to complete the entire number by the year 2000 A. D. The ballots for the 1920 elections contain the names of 204 nominees, 177 men and 27 women. Of these, twelve names are those of medical men, viz.:

Ephraim McDowell.
James Marion Sims.
Lyman Spalding.
Walter Reed
Benjamin Rush.
William T. G. Morton.
C. T. Jackson.
Crawford W. Long.
William Lillingham Bull.
Frank Abbott.
William Shippen, Jr.
John Murry Carnochan.

Could any woman in all the world fail to vote for that pioneer "backwoods surgeon," Ephraim McDowell, who in 1809 at Danville, Ky., opened the abdomen and did his first and epoch making ovariectomy. Not only did this

operation save Mrs. Crawford's life but it was an example which has been followed by surgeons in all the world that has saved the lives of actually thousands or millions of her sisters.

Pages might be written in support of the claim of each of these names to a place and every name deserves a place.

Certainly one of the five tablets to be filled this year should contain the name of a medical man.

DR. GEORGE GILLETTE THOMAS.

In the passing of Dr. George Gillette Thomas at his home in Wilmington, N. C., Sept. 9, 1920, the State of North Carolina has lost one of its most accomplished physicians and the Atlantic Coast Line Railway its honored chief surgeon.

Dr. Thomas was graduated from that fine old college of medicine, the Medical School of the University of Maryland, in 1871, licensed by N. C. State Board Medical Examiners and joined the State Medical Society the same year, entering on practice at Wilmington. In addition to soon acquiring a deserved reputation as one of the city's most courteous and skillful practitioners, he soon associated himself with the distinguished Dr. Thos. F. Wood in the editorial management of the N. C. Medical Journal. This alliance, to the pleasure and gratification of both gentlemen, continued to the end of Dr. Wood's life.

In the course of his active life every honor his state profession could bestow came to Dr. Thomas, membership on the State Board Medical Examiners, membership and presidency of the State Board of Health, presidency of the State Medical Society, and early in the present century when the Atlantic Coast Line Railway was perfecting its great system and looking over the wide field for a skilled physician experienced in every detail of his profession, and likewise possessed of that peculiar wisdom and diplomacy so vital to great success in high position, Dr. Thomas was the choice of the Executive Board of the great corporation sitting in session in New York, and he was unanimously selected. Receiving the felicitations of his local conferees who at a special meeting presented him with a

handsome silver loving cup, he retired from private practice and essayed the task of building the present wonderfully successful medical department of the Coast Line system of railways.

A handsome manly gentleman who loved his fellow man, Dr. George Thomas graciously wore his many honors and in his recent passing the world loses a kindly friend, a capable physician, an efficient administrator and a man whose life was distinctly helpful to those with whom he came in contact.

Urology

A. J. Crowell, M. D., Department Editor

The Diagnosis of Tuberculosis of the Kidney.

Dr. D. N. Eisendrath, in the Chicago Medical Record, says that in no other surgical lesion of the kidney are the end-results of treatment so satisfactory if the diagnosis is made early as in renal tuberculosis. From 45 to 60 per cent of these cases, however, are treated for months and sometimes for years as cystitis and the underlying tuberculosis remains unrecognized.

Eisendrath classifies cases of renal tuberculosis into six general types according to the onset of the condition: (1) those in which the symptoms of cystitis predominate; (2) those in which the first symptom is a more or less severe haematuria; (3) those in which the symptoms point directly to the kidney, or both renal and vesical symptoms are combined; (4) cases of apparently acute onset characterized by chills, fever, and local symptoms resembling those of ordinary pyogenic infection of the kidney; (5) so-called "silent" cases in which loss of weight and strength and indefinite lumbar or abdominal pain are usually associated with the presence of a tumor in the region of the kidney (closed pyonephrosis); and (6) those in which the appearance of a perinephritic abscess is the first symptom.

Case reports illustrating these various types are given. The possibility of renal tuberculosis must always be considered whenever one of the groups of clinical symptoms described is noted.

Only by a most thorough study of the entire urinary tract is it possible to exclude other forms of renal infection.

The more important data upon which a diagnosis of renal tuberculosis may be based are:

1. Bladder symptoms. These consist of increased frequency of urination at first at night, but later also during the day; painful urination which is concomitant with the increased frequency and gradually becomes more marked; and great irritability or incontinence.

2. Kidney symptoms consisting of a dull ache or recurrent colicky pains on the affected side or, in cases of bilateral involvement, on both sides.

3. Fever. As a rule the fever is slight unless there is a mixed infection or sudden retention.

4. Urinary findings such as pyuria, haematuria, and the presence of tubercle bacilli in the urine. In closed pyonephrosis, however, neither pyuria nor tubercle bacilli will be found. In open pyonephrosis the bacilli can be demonstrated in about 80 per cent by the Forasell or Crabtree method.

5. Cystoscopy and ureteral catheterization. This is the most important single method of diagnosis.

6. Pyelography and X-ray examinations. These should be routine in all cases as they give much valuable information as to changes in the renal pelvis and parenchyma.

Gynecology and Obstetrics

Robt. E. Seibels, M. D., Department Editor

Salt Content of Human Milk.

As the result of the examination of about 400 samples of milk taken from the first day to the seventeenth month of lactation, Warren R. Sisson and W. Denis, Boston (Journal A. M. A., Aug. 28, 1920), found that after the first week, during which slightly higher figures prevail, the average chlorid content of breast milk varies but little, being about 50 mg. per hundred c.c. of milk. The authors feel that diet is not the essential cause in the variation in the chlorin content, and that some other factor must play an important part.

Total Hysterectomy in Fibroid Tumors of Uterus.

The technic employed by John Osborn Polak, Brooklyn (Journal A. M. A., Aug. 28, 1920), has been so planned as to obviate and overcome the criticisms of total removal and the claims for the incomplete operation; and the end-results have been so satisfactory that he has come to consider total hysterectomy as one of the curative measures that can be offered the woman with extensive fibroid disease. His technic is described in detail.

Unusual Case of Mercuric Chlorid Poisoning.

In the case cited by Clayton McPeck, Columbus, Ohio (Journal A. M. A., Sept. 4, 1920), a tablet of mercuric chlorid of 7 3-10 grain strength was dropped through the open nozzle into the bulb of a syringe and water poured in. This preparation was used so hastily that the tablet did not have time to dissolve. As a result, the tablet and water were forced into the posterior vaginal vault, the tablet remaining there. After two hours of fitful sleep, the patient awoke, suffering violent pain in the lower abdomen and vagina, nausea, vomiting, irregular heart action and syncopal attacks. Caffein sodiobenzoate, copious douches of albumin and Seiler's solution were given an hour later. Within thirty-six hours a black area or line made its appearance on the upper and lower gum surfaces. The teeth became loose and sore. Salivation was very marked. The gums sloughed and the mucosa of the hard palate was partially detached. The nasal mucosa sloughed, and capillary oozing continued from the mouth and nose for a period of twelve days. From the third to the seventh day the patient could not talk. The senses of smell and taste were lost for four weeks. The vaginal mucosa detached in large pieces. Optical examination revealed a large ulcer on the posterior part of the cervix, which persisted for six weeks. Urine examination on the sixth day revealed albumin, blood cells, blood and granular casts, bladder cells and debris. The alimentary tract began to act vigorously on the fifth day, when thirty-three stools in thirty hours were noted. Long shreds of intestinal mucosa and clots of blood were present. The bowel con-

dition subsided in three days, after which action was induced as needed by the subcutaneous use of pituitary extract. In a general way the patient made a recovery, although after four months the urine still shows albumin in casts.

Orthopaedics

Alonzo Myers, Department Editor

Reconstruction of Ligaments by Grafts and Transplantation of Tendons.

De Frenelle, in the August issue of the *Journal de Chirurgie*, Paris, says that the best way of rebuilding articular ligaments is by grafting and transplantation of tendons. Animal tendons should be used, it being then possible to choose one of the proper length, size and resistance. Kangaroo, reindeer and calf tendons are very good, their resorption being very slow, thus giving time to the organism to build the autogenous tendon which is needed. In case of marked luxation, a graft of strong animal tendon is indispensable, traversing both epiphyses and thus buckling the joint ends together. Transplantation of the periarticular tendons is excellent to supplement the grafting. The typical operation for this, in a case of paralytic luxation of the knee described, consisted in fastening the tibia to the outer condyle with two new ligaments. One in front, slit off from the fascia lata, was fastened to the third adductor, and one behind, slit from the semitendinosus, was fastened to the posterior crucial ligament.

Cartilage Grafts.

Mauclair in the *Presse Medicale*, Paris, August 11, 1920, traces back to 1852 the history of cartilage implants, and reviews the recent work in this line. Autografts of costal, tracheal, laryngeal and ear cartilage in soft parts may prove successful, but as a rule the graft becomes transformed into fibrous tissue or is absorbed or encysted. In heterologous tissue, success is less frequent, and heteroplastic implants are always resorbed. Costal cartilage grafted on bone tissue seems to be successful; it is an active graft on almost homologous tissue and it functions. The epiphyseal cartilage reimplanted in similar tissue

dies in the center, and although the periphery lives, yet it is of no practical utility. The hope of using cartilage from animals has had to be abandoned for the present. Diarthrodical cartilage grafts may succeed if their nourishing synovial membrane is left on them and a little bone tissue.

In the *Journal of Orthopaedic Surgery*, September, 1920, Dr. J. K. Young reports cases and tells of an undescribed condition of hypertrophy of the head of the fifth metatarsal.

The abnormality is a hypertrophy of the head producing swelling and pain similar to a *Halux Valgus*. The swelling may be uniform or it may appear on the outer side only. Atrophic changes are present. Other metatarsals usually unchanged.

X-ray shows enlargement and rarefaction. The outer side of the head is prominent over the fifth, and the little inclines toward the fourth toe.

Treatment: Longitudinal incision; incise capsule and chisel away the outer portion of the head, chiseling from the proximal toward the distal end which prevents splitting of the shaft. Preservation and an accurate closure of the capsule is important.

In the September, 1920, number of the *Journal of Orthopaedic Surgery* Dr. Roland Hammond describes and reports cures of what is probably a frequent cause of pain in the great toe—namely: adhesions of the internal Sesamoid bone.

The cardinal symptoms are localized tenderness over the Sesamoid or the metatarso-phalangeal joint, which is exaggerated on bearing weight.

X-Ray shows no evidence of a pathological lesion. Operative findings show adherent Sesamoids to the metatarsal bone and loss of cartilage to both metatarsal and Sesamoid. Removal of the Sesamoid gives relief.

In the literature which it has been possible to consult, no reports bearing on this subject have been found.

State Medicine

L. B. McBrayer, M. D., Department Editor

Minimum Standards of Organization for Municipal Health Departments.

"The days of the part-time, unskilled health officer and the old-time sanitary inspector are numbered," says Carroll Fox, Washington, D. C. (Journal A. M. A., Sept. 18, 1920). It is now realized that health officials must be thoroughly familiar with their work both in theory and in practice. With increasing knowledge among the people, popular opinion is delegating more and more authority to the health department and increasing its duties manifold. In order that these duties may be performed satisfactorily and that good results may accrue, the employment of full-time, trained men is imperative. The purpose of a health department is conservation of health and prolongation of life. It may therefore be considered as a department of preventive medicine. Its functions and duties are essentially the same in practically all cities regardless of their size. Difference in the amount of work to be performed are absolute and not relative, and this alone should determine the size of a health department. A small city may have an efficient health department, and yet its organization may be very simple. Complexity of organization increases with the size of the community, although the principles underlying public health work remain the same. As a city increases in size, details of administration make it necessary to depend more and more on subordinate officials; but every activity of the large health department should have its counterpart in the smaller organization, although in the latter, one official may be performing the duties which in a larger department would be distributed among many in several different divisions. The smallest health department which nevertheless contains all of the elements essential to public health work may be regarded as consisting of one physician with the qualifications of a health officer, one public health nurse and one clerk, all full-time employees. A larger department may be considered as a development from this nucleus resulting in a multiplication of personnel, special-

ization along certain lines, and logical to co-operate with one another without distribution among bureaus calculated unnecessary reduplication of effort or waste of time and money. With economic conditions as they are today, it is not possible to state positively the amount required to defray the expenses of a health department; but it is suggested that the appropriation necessary to maintain a minimum health organization varies from 50 cents to \$1 per capita per annum. It is thought that in a city of 10,000 population 75 cents per capita would be sufficient to maintain the minimum organization consisting of the nucleus mentioned above. Maintenance includes office and laboratory expenses, printing, expenses of an inexpensive automobile, etc. The health officer must perform the duties of bacteriologist, epidemiologist, school, milk and food inspector, etc. In a city of 25,000 population, 75 cents would hardly cover the expense, as a city of that size should have a small isolation hospital. In a city of 25,000, the total annual expense would be \$18,750. In this organization the epidemiologist performs the duties of a bacteriologist, and he divides the duties of school inspector and dispensary physician with the health officer.

Malaria Awakening of the South.

L. D. Fricks, Memphis, Tenn. (Journal A. M. A., Sept. 25, 1920), advises that the health officers of the Southern States should undertake to secure such legislation as may be necessary to prevent the increase of malaria, resulting from agricultural and industrial development—"man-made malaria"—particularly in relation to (1) drainage projects, (2) highways construction, (3) new construction of railroads, and (4) impounded waters. The state health officer should be given proper legal authority to advise in the planning of these new projects so far as they may affect malaria prevalence. And where such undertakings will greatly increase the prevalence of malaria, the health authorities should have the power to prevent their construction. The state and local health authorities should use every effort to secure the enactment and enforcement of an ordinance directed against the propagation of mosquitoes in those cities and incorporated towns that lie within the malarious dis-

tricts of the state. In every state in which malaria is a serious sanitary problem, there should be created in the state health department a malaria division for the compilation of malaria statistics and the direction of malaria-control measures. Among its other duties, the malarial division should collect and distribute correct information concerning the yearly loss due to malaria for each county in the state. One of the prime duties of the state health department should be to secure the reporting of malaria cases as successfully as has been accomplished with other communicable diseases. With thousands of industrial concerns and the communities surrounding them (representing one-fourth of the population of the South) under proper malarial control, it is not too much to hope that the direct effect will be appreciable, and that indirectly it may lead to the removal of this handicap to Southern prosperity from all except the most remote settlements.

X-Ray and Laboratory

Robert H. Lafferty, M. D., Dept. Editor.

Radium in Treatment of Malignant Tumors of Nose and Throat.

In the opinion of Robert Sonnenschein, Chicago (Journal A. M. A., Sept. 25, 1920), the future of radium therapy seems very bright, particularly in reference to applications in tumors of the nose and throat; but great caution is advisable in statements regarding actual cures. It is important to watch for recurrences during a period of from two to five years. In reporting cases, authors should give details of the preparation used, the method of application, duration of exposure, etc., in radium treatments. Following up the cases and reporting on them again whenever possible is of the utmost importance in the formulation of definite conclusions regarding the results of radium treatment. Radium is probably of great value before, and certainly after operations. It is very efficient in relieving pain, hemorrhage, discharge, etc., in many inoperable cases. Sarcomas are especially responsive to radiation; the carcinomas yield much less readily, and the squamous type of epithelioma is

scarcely amenable to radium at all. Complications, at least those reported, are not so frequent as one would be likely to expect. Burns were the most common ones, but even death may result from toxemia. Radium has many advantages as compared with roentgen rays, especially for application in the nose and throat. The diagnosis of the malignant cases should be made by a competent laryngologist, and the radium applied either by him or in cooperation with a radiologist. Only in this way will correct statistics and reliable results be obtained, with greatest benefit to the patient and the safest guidance to the profession.

NEUROLOGY.

R. F. Leinback, M. D., Department Editor.

Physical Factors in Mental Retardation.

Following the plan of making first a thorough physical examination and then intensively investigating every clue uncovered, Edward A. Strecker, Philadelphia (Journal A. M. A., Sept. 4, 1920), was able to determine that in eighteen, or 56 per cent., of all his cases congenital mental deficiency did not exist at all, and in fifteen, or 84 per cent., of the retarded group, there were significant underlying physical factors on which the mental retardation depended. In other words, there is more than an even chance that unless a careful search is made for possible physical causes, the diagnosis of true mental deficiency may be an error and the child may be mistakenly admitted to an institution for defectives. In his list there were six instances of congenital syphilis, including one with anemia and ozena; one case of chronic suppurative tonsillitis and valvular heart disease; one of rachitis; one of angular gyrus lesion; one of hypopituitarism; and five children who, although they had no definite organic disease, were nevertheless markedly under-nourished and underdeveloped as a result of economic and environmental conditions.

Nurses Corner

Edith M. Redwine, R. N., Dept. Editor

Lest We Forget the Peace Time Call of the Red Cross.

Effie E. Cain,

Secretary Board of Examiners of Trained Nurses of North Carolina.

There was held in Atlanta, August 23-27, a conference of Red Cross workers of the Southern Division, American Red Cross. From each state of the division (North and South Carolina, Georgia, Florida and Tennessee) there came to this conference Field Representatives, Public Health Nurses, Home Service Secretaries, and Instructor in "Home Hygiene and Care of the Sick."

A program relative to Red Cross work in all its phases had been prepared with the view on the part of the program committee of making the conference interesting, informing and inspiring. And such it was, interesting to hear workers tell of their activities, informing to learn what has been accomplished by chapters and branches, inspiring to listen to division officials as they gave expression to the high ideals toward which the Red Cross is working.

And this work is not of narrowed limitations. It is international, national, divisional and local. If a survey of the activities of this organization is made it will be found operating to serve in local communities, in the South, in the entire country and then reaching out helping hands to the nations of the world. The unit for this world wide work as well as for that nearer home is a well organized and working chapter.

A working chapter is made up of a personnel rejoicing to meet the needs of humanity.

A part of the work made possible by the Red Cross membership contributions of 1920 is summed up in the figures given below. More than 30,000 victims of various disasters, fires, floods, tornadoes, and other unavoidable accidents have been given relief; more than one thousand Red Cross nurses have been supplied for wounded and sick ex-service men in United States Public Health hospitals; and more than 26,000 wounded men are being ministered to in various hospitals throughout the United

States. Nor is this all. If all the work of the Red Cross in all the states and in all countries should be written of there would be almost an endless story of faithful and fraternal labors. The keynote of the Atlanta conference was service, and the incentive made powerful by the discussions and finding a route to the hearts of those present was "The community, the nation, the world needs service, and to render this service is to follow the leading of the Master."

Not all Red Cross activities can be written of in this brief report; but there is one other feature of the Red Cross peace-time program which is far reaching and intensely important. This is the work of organizing mothers and daughters into classes to study the Red Cross textbook, "Home Hygiene and Care of the Sick." Thousands of women enroll in these classes and complete the course, receiving both instruction and demonstration in the care of the sick at home.

Not this only, but the Red Cross instructors teach just as energetically the importance of preventing sickness.

The "Red Cross of Peace" is with us prepared to meet any emergency, to care for ex-service men and the wounded soldiers and their families, if need be, to give aid to the aged infirm, to enable children who are crippled to walk, those who are weakened by disease or neglect to grow strong, to soothe suffering wherever found and to serve mankind.

Beginning November 11, Armistice Day, and finishing the task November 25, Thanksgiving, the American Red Cross is to have the fourth Roll Call, during which time from our citizenship it is hoped a 100 per cent Red Cross membership will be enlisted.

Lest we forget, and in forgetting we neglect some suffering one, it is urged upon the readers of the Charlotte Medical Journal that they hail the coming of this Roll Call as an opportunity to assume the role of the "Good Samaritan" to those who have fallen victims of disaster or disease, to be neighbor to those who are unfortunate. Commensurate with the response to this Roll Call will be the work of soothing, serving, and saving by this "Greatest Mother of them all" during the year 1921. How many will be found faithful when the call of need to distress comes?

News Items

MEDICAL SOCIETY MEETS.

The Carteret County Medical Society met in Morehead City on the afternoon of September 23rd, 1920, and took a new start life. Dr. C. S. Maxwell, of Beaufort, was elected president, Dr. D. H. Reed of Morehead City was elected secretary, and Dr. P. B. Loftin, of Beaufort, Dr. B. F. Royal and Dr. K. P. B. Bonner, of Morehead City, were elected as censors.

Various plans were discussed with the idea in view of making the society a good, live, honest-to-goodness working society that would be of real worth to each member. After this discussion it was decided that at each meeting in the future a member would be designated to plan a program, prepare a paper and to have in charge the scientific side of the meeting. It was mutually agreed that it was to the best interest of the society to accentuate the clinical side of medicine and that in the future each and every member be only encouraged but earnestly urged to present any interesting clinical conditions that might fall in his hands. Each member felt that by adopting this plan of carrying on our meetings that they would be of inestimable value to each member.

You may expect news items from time to time as the material shows up. Fortunately I am in the position to be in touch with the movements within the profession. K. P. B. BONNER.

SEVENTH DISTRICT (N. C.) MEDICAL SOCIETY MEETS.

The Seventh District Medical Society met at Lincolnton October 4th and 5th. The opening session was held in the school auditorium at 8 p. m., October 4th, with Dr. L. N. Glenn, of Gastonia, in the chair. After the preliminary exercises the part of the program which used lantern slides was given and at 11:30 the meeting adjourned to the Masonic Temple, where the ladies had in waiting a most sumptuous banquet.

The meetings on Tuesday were held in the Masonic Hall. The attendance was good, the papers were all well prepared and presented and indeed the entire

meeting was most helpful to all.

Concord was chosen as the meeting place for next year.

Officers elected are: President, J. R. Gamble, Lincolnton; vice president, P. R. McFadden, Concord; secretary, Raymond Thompson, Charlotte.

CLINICAL CONGRESS OF AMERICAN COLLEGE OF SURGEONS.

North Carolina doctors are well represented at the clinical congress of the American College of Surgeons which is in annual session at Montreal, Canada, this week, October 11-15. A special Pullman with every berth filled left Charlotte the evening of October 8, which was taken through to Montreal without change, arriving there on the morning of October 10.

Those who had reservations in this car are: M. L. Townsend, Charlotte; A. M. Whisnant, Charlotte; L. A. Crowell and wife, Lincolnton; C. W. Banner and wife, Greensboro; George W. Pressley and wife, Charlotte; D. A. Stanton, High Point; J. W. Long, Greensboro; James W. Tankersley, Greensboro; J. P. Munroe, Sanford; E. T. Dickenson, Wilson; D. T. Tayloe, Washington; J. H. Highsmith, Fayetteville; N. A. Thompson, Lumberton; P. R. McFadden, Concord; A. D. Parrott, Kinston; W. W. Fennell, Rock Hill; Oren Moore, Charlotte; R. W. Petrie, Charlotte; R. L. Gibbon, Charlotte; B. C. Nalle, Charlotte; J. P. Munroe, Charlotte; J. P. Matheson, Charlotte; A. J. Crowell, Charlotte.

The Ninth District Medical Society met in Mooresville, N. C., October 12, 1920. The members of this District who were present were: Drs. J. B. Council, R. V. Brawley, H. H. Newman, C. M. Van Poole and H. L. Monk, of Salisbury; R. S. McElwee, M. R. Adams, J. W. Davis, Roy C. Tatum, Fred C. Hubbard and J. E. McLaughlin, of Statesville; W. H. Kibler and I. M. Taylor, of Morganton; D. J. Hill, Lexington; Baxter Byerly, of Cooleemee; E. M. Summerell, China Grove; G. A. Brown, Mt. Ulla; A. E. Bell, G. W. Taylor, S. A. Rhyne, W. E. Wilson, Banks Withers, W. H. Bennett and W. D. Gilmer, of Mooresville. The visiting physicians were Drs. Addison G. Brenizer, John R. Irwin, William Allen, W. O. Nisbet, R. F. Leinbach, H. L. Sloan, C. C. Phillips,

C. M. Strong and I. W. Faison, of Charlotte; J. W. McConnell and George Withers, of Davidson.

Dr. S. Frontis (one of our local dentists) delivered a most interesting and able address of welcome, in fact it was a masterpiece. In the absence of Dr. H. C. Menzies, who had gone to Montreal, Canada, Dr. M. R. Adams presided. As Dr. T. E. Anderson was unavoidably prevented from attending, Dr. E. M. Summerell responded to the address of welcome. Aside from these changes the program was carried out to the letter. All of the papers read were most able ones and most instructive, showing marked ability and familiarity with the subject in hand. Dr. Brenizer's paper accompanied by lantern slides of same was especially good.

The Mooresville physicians entertained those present to dinner at the Commercial Hotel.

Outline of the Preliminary Program Southern Medical Association, Fourteenth Annual Meeting, Louisville, Kentucky, November 15-18, 1920.

Monday Forenoon and Afternoon, Nov. 15:

Southern States Association of Railway Surgeons.

Section on Urology.

Section on Orthopedic Surgery.

Section on Roentgenology.

Section on Obstetrics.

Conference on Medical Education.

Southern Hospital Association.

Southern Gastro-Enterological Association.

National Malaria Committee (Conference on Malaria).

Association of American Medical Milk Commissions.

Dinner (evening) to Presidents and Secretaries of State Medical Associations, and to State Health Officers.

Tuesday, Nov. 16:

General Opening Session—Address of Welcome, President's Address, Orations on Medicine, Surgery and Public Health, etc.

Tuesday Afternoon, Wednesday Forenoon and Afternoon, and Thursday Forenoon, Nov. 16-18.

Section on Medicine.

Section on Pediatrics.

Section on Public Health.

Section on Surgery.

Section on Eye, Ear, Nose and Throat.

Thursday Afternoon, Nov. 18:

Last General Session (short) followed by the Symposium on Nephritis, participated in by all the sections.

Tuesday Afternoon, Nov. 16:

Musical and Tea for Visiting Ladies.

Tuesday Evening, Nov. 16:

Reception and dance in honor of the President and Visiting Members of the Southern Medical Association.

Wednesday, Nov. 17:

Automobile Ride and Luncheon at Louisville Country Club for Visiting Ladies.

Wednesday Evening, Nov. 17:

Alumni Reunion Dinners.

Monday, Tuesday, Wednesday and Thursday:

Scientific Exhibits—the outstanding feature of this meeting.

Tuesday, Wednesday, Thursday:

Moving picture demonstrations in connection with Scientific Exhibits.

Bertie County.

It is with great admiration that I note the "Get-Together" movement that you are encouraging through your journal.

The last regular meeting of the Bertie County Medical Society met in Windsor, N. C., Thursday, Oct. 7, with our regular 100 per cent attendance. The discussion for the meeting was "Fevers Prevalent to Bertie County During the Fall Months," and the following papers were read and discussed: "Typhoid Fever as We Find It in Bertie County"—Dr. S. A. Saunders, Aulander, N. C. Discussed by Dr. L. B. Evans, Windsor, N. C.

"Severe or Unusual Types of Malaria"—Dr. F. H. Garriss, Lewiston, N. C. Discussed by Dr. H. W. Lyon, Windsor, N. C.

"The Prevention and Control of the Spread of Malaria and Typhoid Fever"—Dr. R. F. Benthall, Aulander, N. C. Discussed by Dr. E. P. Norfleet, Roxobel, N. C.

Pneumonia was chosen as the object for discussion at the next meeting and Dr. H. W. Lyon was selected to lead and choose other members to discuss other phases of the disease. At the business meeting fees were discussed and a universal system was adopted.

The society was entertained by the local physicians and due appreciation

for same is here mentioned. Shall let you hear from us regularly.

FRANK H. GARRISS,
Sec. and Treas.

Dr. Davidson Member State Hospital Board.

Dr. J. E. S. Davidson, of Charlotte, has been appointed as a member of the board of directors for the State Hospitals for the Insane as a member of the executive committee of the hospital at Morganton.

The appointment was made by Governor Bickett and signed by J. Bryan Grimes, Secretary of State. He is named in the place of R. R. Clark, postmaster at Statesville, resigned.

The board of directors includes nine members, three serving as the executive committee for the hospital at Morganton, of which Dr. Davidson becomes a member, three for the hospital at Goldsboro and three for the hospital at Raleigh.

Dr. Davidson was a member of this committee for Morganton for four years, during the administration of Governor Kitchin, succeeding the late J. P. Caldwell, editor of The Observer for many years.

Dr. Walter F. Cole, Greensboro, N. C., announces his devoting his entire time to his specialty of Orthopaedics and Children's Surgery. Dr. Cole was for some time House Surgeon to the Boston Children's Hospital, lately locating in Greensboro.

Dr. W. S. Rankin, Secretary N. C. State Board of Health, has been invited and accepted an invitation to deliver the Lamar Lectures at Johns Hopkins Hospital in the early spring of 1921.

Dr. A. J. Warren, late health officer of Charlotte, N. C., resigned and has accepted the appointment as Director Bureau County Health Work of the Kansas State Board of Health.

The big U. S. Army Hospital at Oteen, near Asheville, N. C., which cared for more than 9,000 injured soldiers during the recent war and after, has been discontinued by the War Department, transferred to the U. S. Public Health Service, and will be along with the other large former U. S. Army Hospital at Asheville, Kennilworth, be

operated by the Public Health Service under the War Risk Insurance Act, for the reconstruction of disabled ex-soldiers of the U. S. Army, Navy and Marine. Waynesville, N. C., is also being considered by the Public Health Service as a site for another large institution for similar purpose.

Dr. A. S. Harrison, Enfield, N. C., died Aug. 19, 1920. Dr. Harrison was 54 years of age, a graduate of the University of Maryland, class of 1888, and held a very prominent place in the profession and in his community.

Interment was in Elmwood Cemetery, Enfield, with the impressive ceremony of the Knights Templar.

Miscellaneous

The Stork and the Box Car.

Rattling along the narrow-gauge Serbian railway from Mitrovita to Skoplje, Dr. Dora Bowman, of Kansas City, Mo., of the Serbian Commission of the American Red Cross, assisted the advent of an eight pound Serbian baby as successfully as if the mother had been under her care in a modern maternity hospital.

Doctor Bowman was sitting in her shabby compartment as quiet as the rocky roadbed would permit when the latch of the wooden door rattled furiously. The nurse beside it pulled up the latch. A wild-eyed Sergian clung desperately to the running board and made a great many motions with his hands. The doctor and the nurse understood that they were needed in another car.

At the next station they made their way to a box car just behind the engine and the wheels began rumbling again. Before Skoplje was reached a baby was born. All the conveniences of a modern hospital were not to be had in the box car, and once in a while as the doctor's fingers hurried here and there she sighed for a this and a that which she might have had in a big maternity ward back home.

"It's a boy, and it must weigh eight pounds," she exclaimed at length. "The stork is just as much at home in a Serbian box car as among clean white linen in noise-proof rooms."

Cobwebs vs. Quinine.

For fifteen hundred years the peasants of the Pontine district of Italy, near Rome, have been trying to cure malaria with pills whose principal ingredient is cobwebs. Needless to say they have not succeeded very well, and as a result fever takes a startling toll of lives every year in this unhealthy region.

Recently, however, the Junior Red Cross of America, through its three orphanages, has introduced the miracle of quinine among these people, who are direct descendants of the Sabines and retain many of their pagan customs. Cobweb pills have therefore lost some of their prestige in face of the cures which have been made, and offerings to the fever goddess, which formed a sort of secondary treatment, are going out of style.

The Pontine region is one of the most unhealthy in Italy. Most of the women have been widowed two and often three times by malaria—this curious state of affairs being accounted for by the community law which forbids the women to leave the high and dry places where the villages are built and accompany their husbands who go to their daily labor in the fever filled valleys.

The Meaning of Rest to Patients.

One of the fundamental dicta with regard to metabolism is that it increases with work or muscular effort. How large, comparatively, the increment may be is less well appreciated. The answer to the question has an important bearing on the food requirements of the working person; there is also a significant relationship of effort to energy expenditure in the case of the sick who need to conserve or gain. The doctrine of rest, either complete or limited, is one that the physician finds desirable to inculcate often. What is gained thereby in the mere conservation of food fuel or body tissues can be well understood by a consideration of what exertion really entails. The expenditure of energy in the body is affected by a number of factors, which include age, size, sex and occupation. The loss of energy per unit of accomplishment is greater in those cases in which the worker is untrained and the muscles are unpracticed for their tasks.

Fatigue also causes inefficient performance.

The activities of a recuperating or resting patient are comparable in some degree with the lightest types of housework. What this may mean in terms of energy has recently been described by Langworthy and Barott (1) of the Office of Home Economics, U. S. Department of Agriculture. Light tasks, such as sewing, crocheting or embroidering, call for an average expenditure of about 9 calories an hour more than that of the same person sitting quietly in a chair. Tasks regarded as "harder work" than sewing, such as washing, sweeping or scrubbing, require an increment of at least 50 calories an hour.

The government experiments have shown how the mere change in the height of the table at which work is being done may cause an increase of from 20 to 40 per cent. in the calories required. This illustrates, to quote the report, the importance of choosing equipment to "fit" the worker. If the lesson is applied to the sick room, however, it serves as a patent reminder of what is too often overlooked by both the patient and attendants, namely, that it requires only a seemingly small degree of discomfort or added effort to waste a relatively large fraction of available "strength" and energy. Conversely, complete rest represents the possibility of real conservation if the food intake and the metabolic capacity are not impaired. Even easy work—indeed, sometimes mere sitting up or the operation of dressing—means a real cost to the body which it may be well to save in times of nutritive stress, when economy of energy is an immense gain to the patient.—*Jour. A. M. A.*, Aug. 28, 1920.

There was a sweet young Y. M. C. A. secretary loose on the streets of Paris who was accosted by a woman of the "oldest profession." After sternly trying to rebuke her in ecclesiastic French he decided to seize her and turn her over to the police. However, the maid was a bit stronger than the usual Y. M. C. A. secretary and she sent this one sprawling. Just as the divine young thing got to his feet a gendarme rounded the corner and our secretary rushed up to him and shouted: "You must catch that woman for me—she's a street walker." The gendarme calmly replied

in perfect English: "That's all right—just stay right here and there will be another one along in less than a minute."

Prevention and Control of Venereal Diseases.

Sherman Lull (Minnesota Medicine, April, 1920) gives the following reasons for the difficulty in contending with the problem of venereal disease control and prevention:

First—That the incidence of these diseases is primarily due to the strongest and least controllable natural instincts and passions in the human mind.

Second—Ignorance on the part of the public in regard to these diseases and their disastrous effects.

Third—The prevailing ignorance and false modesty in regard to sex, sex hygiene and concealment of the venereal diseases.

Fourth—The most important of all, is quackery, carelessness and ignorance in the diagnosis and treatment of these diseases.

Diet and Diseases of the Skin.

The Kentucky Medical Journal remarks that the relationship of diet to many diseases of the skin is still largely an unsettled question. This is partly due to the lack of accurate classification of certain dermatoses according to etiological factors, the diagnosis still being made on the external manifestations of the disease. It is as if we were to deal with all meningitis cases under one head of meningitis, instead of regarding them as coming under the head of meningococcus meningitis, tubercular meningitis, pneumococcus meningitis, etc.

The principal dermatoses in which we are able definitely to assign a role to the diets are psoriasis, eczema, urticaria and acne vulgaris.

In psoriasis interesting studies have been made by Bulkley, White, Schamberg, Kolmer, and Raizis. After extensive experiments in their Philadelphia clinic, Schamberg and his confreres came to the following conclusions: (1) on a given proteid diet a psoriatic eliminates less urinary nitrogen than a normal person; (2) even on a diet so low in proteid that a normal person would fail to maintain a nitrogenous equilibrium the psoriatic shows a tendency toward a retention of nitrogen; (3) low

proteid diets have a favorable effect on the psoriatic lesions, particularly in extensive cases. Although we have experienced benefit in psoriasis from a low proteid diet we have not found that the lesions can be caused to disappear by this means alone.

In many cases of urticaria the diet alone is at fault. Eliminating focal infections and reflex cases we find a large number of urticarial cases due to the ingestion of certain foods, especially pork, sausage, strawberries, tomatoes and shell-fish, although any food may be the cause.

In many cases of acne the diet plays a highly important, even if secondary, part. Some cases do not appear to be affected by the diet at all, but in other cases only a rigid adherence to a careful diet will cause the condition to disappear. Diet alone in these cases seldom achieves perfect results, yet with a careful regulation of the diet it may be possible to prevent relapses.

While a certain percentage of eczema cases have long been suspected as dietary in origin no thorough studies were at hand to corroborate this. In the last few years an attempt has been made to deal with this subject and separate cases due to diet from those due to other causes. The diet may be at fault in either one of three ways: There may be an excess of either proteid, fat or carbo-hydrate in the diet or an inability to handle one of these classes properly, even when not in excess; there may be a deficiency in vitamins in diet. To determine the presence of anaphylaxis small amounts of various proteids are employed, either being rubbed into an abraded area on the skin or injected into the epidermal layers of the skin. A positive reaction of the skin denotes a sensitization to that particular proteid. In fifty per cent of the cases showing an anaphylaxis elimination of that proteid from the diet is said to have been productive of beneficial results. In the second class we find ninety per cent of all cases of infantile eczema; in these cases even mild local treatment is productive of good results when the diet has been corrected. In the last class, the vitamin deficiency class, may be listed the malnutrition cases due to lack of fresh food, such as we see both in the slums of our large cities and in ignorant country districts. Milk, butter, fresh vegetables and fruit usually

furnish a sufficiency of the necessary vitamins to cause these conditions to clear up.

The diet undoubtedly plays a primary or secondary role of importance in other dermatoses besides those mentioned, but our data is insufficient as yet to base any definite conclusions upon.

Quinine in the Treatment of Hemoptysis.

Dr. Joseph E. Strobel, of Hartford, Conn., states that hemoptysis or blood-spitting is frequently the first symptom to call the attention of a person to the fact that he is in urgent need of medical care. In varying instances it has been passed by lightly and looked upon as a throat or stomach hemorrhage, when to the average physician it is almost pathognomonic of pulmonary tuberculosis. These hemorrhages have a large degree of variance in amount, ranging from a streak to 1,000 mills or more. The duration also varies greatly from a few minutes to days.

As to the cause of this fear-begetting symptom, many theories have been put forth. Some of them are overexertion, ulceration of the wall of a blood vessel, loss of tissue which formerly supported the blood vessel wall, high blood pressure, mixed infection, and changes in the barometric pressure.

In looking over the literature at my command on the subject, I find quite a difference of opinion regarding the treatment of this complication. Some say there is little we can do, others that it matters not very much what we do, as a patient seldom dies from the immediate effect of hemorrhage, but, on the other hand, usually recovers. Among the great number of drugs recommended in the treatment of this symptom are morphine, ergot, alum, adrenalin, magnesium sulphate, blood serum, digitalis, salt, gelatin, and the nitrates.

Going back to the causes of this symptom, we can say that the first, over-exertion, can be practically ruled out, as all of the hemorrhages that have come under my observation have occurred in patients who have been resting or who have been in bed. Again, a patient often comes with a story that some time ago he coughed up some blood and either continued at his work or returned to it in a day or two with-

out any recurrence. High blood pressure can also be discounted very highly, as it was found at the Meriden Sanatorium that the blood pressure was low in some 15,000 to 20,000 readings and that immediately after the hemorrhage, even if it were a large one, the pressure would rise in some instances as much as fifty mm. Hg. In view of this we might say that a high blood pressure is the result and not the cause of hemorrhage from the lung.

Before the following experiment was carried out, we frequently had the disagreeable experience of group hemorrhage, or in other words, an epidemic of blood spitters. There would be as many as four or five patients all bleeding at the same time, and not infrequently a like number of patients in another building would be suffering in the same manner. In a great number of instances the result of this would be a spread of the disease into new tissue or a lighting up of a heretofore quiescent area or a remote pneumonia.

Assuming that the theory of mixed infection was correct I undertook to prove it and if possible to devise some method of procedure whereby this complication could not only be promptly cleared up, but prevented. Fifty-four healthy full-grown rabbits were used. Into each one was injected subcutaneously $\frac{1}{2}$ mil of fresh bloody sputum from as many different patients and during different seasons of the year. The result was that fifty-one developed a lobar pneumonia and a pneumococcic septicemia, two developed a localized tuberculous abscess, and one an abdominal abscess from which a pure culture of streptothrix was obtained. Five of the fifty-one rabbits were controlled by a rabbit of similar weight receiving a similar inoculation, but to which had been given fifteen minutes previous one grain of quinine sulphate intravenously. These controls were killed after two or three months, presenting all organs and blood free from tubercles and diplococcic pneumonia.

As a result of these findings our treatment of this condition has been changed accordingly. Patients coming to the sanatorium with history of hemorrhage or blood spitting, especially of recent occurrence, are given quinine every four hours in 5-grain doses for one week. The symptom seldom recurs. Resident patients whose sputum is

bloodstreaked are given the same treatment. Patients who have hemorrhage are given the same dose, but at shorter intervals. Nothing else is done so far as drugs are concerned. The patient is placed on liquid diet, kept in bed, and if it is comforting an ice cap is placed on the chest. Our results have been quite favorable. Hemorrhage has become a rare occurrence. When a hemorrhage does occur it clears up promptly and with little or no bad after-effect upon the patient.—Medical Record.

BenzyI Benzoate in Whooping Cough.

BenzyI benzoate, in doses of from 5 to 30 minims every four hours, depending on results, was used by McMurray to good purpose. In some cases decided improvement was noticed from the smaller dose; in other cases larger doses were employed. In almost every instance the treatment determined subsidence of the paroxysms. The effect usually made itself felt within forty-eight hours and in one instance there was relief after the second dose. As a rule, the relief is immediate and complete. No undesirable results were noted. A child 12 months of age was given 20 minims with no evidence of gastric or any other disturbance.—New York Medical Journal.

Immediate Continuous Active Mobilization of Joints.

E. B. Mumford (Medical Record) says that the principles of the treatment of surgical joints as outlined by Willems, though they may not be entirely new, are most radical compared with the former conceptions. The results in the hands of many other surgeons have been equally satisfactory, and the advantages may be briefly summarized thus: 1. Adhesions of a serious nature are reduced to the minimum. One of the most striking observations during the treatment is to watch the open knee-joint during motion and to see the breaking through of the soft fibrous adhesions which had formed during the interval of rest. 2. The most thorough drainage of the joint cavity and the pockets of pus is given through the active mobilization, as at each movement the shape of the cavities is changed and the pus is expressed. Popliteal space involvement is thus less apt to occur. 3. Atrophy of the muscles is prevented. This is one of the

most important phases of the treatment. The tone of the muscle is retained in a way that it cannot be through simple massage and hot applications. 4. The retrogressive changes in the highly specialized tissues of the joint and the muscle and tendon tissues, which come through disuse, are also eliminated. This factor should be emphasized as it is not generally recognized by the surgeon and is one of the most common causes for the stiffness in joints which follows long fixation. 5. With the simple dry dressings the pain which comes through drains and irrigations is prevented. This is an important factor in regard to the comfort and to the general physical condition of the patient.

Tuberculosis and the Abortive Treatment of Syphilis.

Tieche states that in the latter years of the war both tuberculosis and syphilis increased in frequency. This increase means that more individuals suffer from the associated disease, and the question arises, "Does the abortive treatment of syphilis tend to react unfavorably on tuberculosis?" This naturally leads to the subject of the unfavorable influence of syphilis per se, untreated or not, on the companion disease. There is abundant evidence that severe syphilis can light up or aggravate a mild or latent tuberculosis. Infection in well developed tuberculosis does not necessarily aggravate the latter. In fact, there is some experience to the effect that syphilis has been of benefit to tubercle, but to what extent this could have been attributable to the treatment is not certain. The converse is also true, for if today tuberculosis is made worse by syphilis, this aggravation may perhaps be attributed to salvarsan, just as in past years mercury may have been responsible. In view of the different experience the individual can only speak of these matters as he finds them. The author has seen six cases in point in which he was able to follow tuberculous individuals from the time they contracted their chancre. The tuberculosis was in part active and in part latent. In three cases the subjects doubtless were made worse by the neosalvarsan and mercury used by the intravenous route, while two cases of chronic fibroid phthisis were not affected and one glandular tuberculosis

was started up anew. Other patients were seen later in the course of syphilis when it was too late to think of abortive treatment. Here intensive anti-syphilitic measures appeared to cause exacerbations of tuberculosis in some of the subjects and the author cites two such cases. Here as before chronic fibroid phthisis was not prejudiced. Should one abstain from an abortive or intensive treatment of a tuberculous subject when he contracts syphilis? This is a difficult question, for there are not a few tuberculous who will not suffer from this treatment. Too harsh a ruling might bear unfavorably on mere suspects, for in dispensary treatment one cannot go into refinements of diagnosis. It is in these very suspects, moreover, that some of the worst examples of tuberculosis have followed intensive salvarsan treatment. It is evident that we cannot commit ourselves one way or the other in this problem.—Schweizerische Medizinische Wochenschrift.

Can You Answer?

Where can a man buy a cap for his knee,

Or a key to the lock of his hair?

Can his eyes be called an academy?

Because there are pupils there?

In the crown of his head what gems are found?

Who travels the bridge of his nose?

Can he use, when shingling the roof of his house,

The nails on the end of his toes?

Can the crook of his elbow be sent to jail?

If so, what did he do?

How does he sharpen his shoulder blades?

I'll be hanged if I know, do you?

Can he sit in the shade of the palm of his hand?

Or beat on the drum of his ear?

Does the calf of his leg eat the corn on his toes?

If so, why not grow corn on the ear?

—Yeoman Shield.

More Misbranded Drug Products and Nostrums. — The following products have been the subject of prosecution by the federal authorities under the Food and Drugs Act: Seelye's Wasa-Tusa, Dr. Seelye's Compound Extract of Sarsaparilla, Seelye's Laxa-Tena, Seelye's Cough and La Grippe Remedy and

Seelye's Fluorilla Compound (A. B. Seelye Medical Company) were misbranded because the therapeutic claims were unwarranted. Aspirin Tablets (Verandah Chemical Company) were misbranded because they contained no acetylsalicylic acid (aspirin). Dr. Grove's Anodyne for Infants (Smith, Klein & French Company) was misbranded because the therapeutic claims were unwarranted and because the carton failed to contain a statement of the quantity and proportion of morphine and alcohol contained therein. Cacapon Healing Water (Capon Springs Company) was adulterated in that it consisted in part of a filthy and decomposed vegetable substance.—*Jour. A. M. A.*

Benzyl Benzoate. — The chemical properties of benzyl benzoate have been known for years. Its therapeutic properties as an anti-spasmodic have been known only a short time. Before this new addition to our materia medica can be given thorough clinical trial, it is a putrid animal and vegetable substance and misbranded because the curative claims were unwarranted. Seawright Water (Seawright Magnesin Lithia Springs Company) was adulterated in that it consisted in part of a necessary that the products be of a quality sufficiently pure for medicinal use. For the physician's protection, as well as far an aid to the manufacturer, the A. M. A. Chemical Laboratory, at the request of the Council on Pharmacy and Chemistry, has elaborated purity standards. It has also examined the market supply and found that, on the whole, the nonproprietary medicinal brands are of a satisfactory grade for clinical use.—*Jour. A. M. A.*

Baths for Burns.

Davis Forster, New Smyrna, Fla. (*Journal A. M. A.*), gives an account of a boy who was severely burned by an explosion on a gasoline launch. His face, neck, arms, back, buttocks, thighs and abdomen were burned; in fact, the only uninjured parts by which he could be handled were one arm, his legs below the knees and his hair. Under the usual treatment of paraffin gauze he became more and more septic until the stench was overwhelming. On the fifth day, following a suggestion of boric acid fomentations, he was placed in a bathtub full of warm 2 per cent boric acid

solution, the temperature being between 90 and 100 F., for one hour, after which he voided 16 ounces of urine. When he was taken from the bath, the bleeding parts, particularly the buttocks, were treated with an ointment having a petroleum base, while the rest was treated with paraffin after drying. The results were so favorable that the next day he was kept in the bath for three hours, and large sloughs and dead skin were detached. The sloughing on the right side of the neck was so extensive that it was feared contracture would follow, but gradually the condition improved. The baths continued daily, changing from boric acid to physiologic salt solution. At the end of three weeks the patient was on his feet, and in four weeks was discharged "rough healed" with only the right ear sloughing.

The After Care of Operative Cases.

It is a fact well established by hematologists, and well known to the surgeon, that a large majority of surgical diseases, requiring operative interference, are preceded, accompanied or followed by hemolytic changes. In addition to the more or less devitalizing effect of the original condition which brings the patient to the operating table, the necessary anaesthesia, if at all prolonged, reduces the hemoglobin percentage and the shock incident to the operation contributes, to a certain extent, to the surgical anemia. Hemorrhage, Suppuration or Sepsis, precedent to the use of the knife, of course intensifies the post-operative chlor-anemia and renders more than ever necessary the employment of hematogenic measures during surgical convalescence. Judicious but generous feeding is of prime importance in such cases and sedulous attention should therefore be paid to the patient's dietetic requirements. Feeding, alone, however, will not hasten recovery as rapidly as a judicious combination of feeding with a hematinic reconstituent such as Pepto-Mangan (Gude). Except in cases in which it is not permissible to introduce food or medicine through the mouth, this palatable, readily tolerable and promptly absorbable organic combination of iron and manganese is distinctly indicated in preference to other blood building agents, because it is agreeable, non-irritant and free from constipating effect. Its hematinic, appetizing and

general reconstituent properties are quickly evidenced subjectively, by a general feeling of well-being; objectively, by increased color of skin and mucous membrane, and hematologically, by a progressive increase in the number of erythrocytes and percentage of hemoglobin.

Development of Bactericidal Power of Whole Blood and Antibodies in Serum.

The claim is made by J. H. Black, Kenneth Fowler and Paul Pierce, Dallas Texas (Journal A. M. A., Oct. 2, 1920), that the bactericidal power of blood as determined by the method of Heist and Solis-Cohen is the most dependable criterion of the actual immunity of the animal. The development of the bactericidal power of the blood against typhoid and Shiga bacilli is practically identical with that of the serum. The route of inoculation makes no material difference in the rapidity or height of the development of bactericidal power. The agglutinins and complement fixing bodies are only roughly comparable to the bactericidal power. The leukocyte counts and phagocytic index are of no value in determining the degree of immunity. In the rabbit immunized to typhoid and dysentery bacilli, lysis occurs with great rapidity, and a short incubation period is sufficient. No evidence could be secured by the authors in their studies as to the mechanism of lysis. Phagocytosis, in all probability, was not a factor. Citrating and defibrinating blood of rabbits immunized to typhoid and dysentery bacilli did not affect the bactericidal activity save to slow the reaction. In the blood of typhoid and dysentery immune animals, contaminating organisms may grow luxuriantly. A short incubation period removes most of the difficulty due to contaminants. The refractory state of Teague and McWilliams is shown to depend probably on a rapid rise in bactericidal power, and the rapidity of mobilization of this power varies with the route of injection. Inactivation of serum of immunized rabbits did materially reduce the bactericidal action.

Lactic Acid Milk.

Lactic acid milk differs from ordinary sour or spoiled milk, because it is a sour, uncontaminated, sterile milk. Dewitt H. Sherman and Harry R. Lohnes, Buffalo

(Journal A. M. A., Oct. 2, 1920), have been using lactic acid milks in the difficult feeding cases, and have been very much pleased with their results. They are inclined to believe that their results are as good as, if not better than, with the much-lauded protein milk. The authors use two kinds of lactic acid milk, one made of skimmed milk, and the other of whole milk. This makes the formulas very flexible as regards the use of fat, the tolerance for which is so commonly broken in this class of cases. They are likely to start with the skimmed lactic acid milk, and work it up to the desired ratio with its diluent, or as high as it can be well borne. As the child's digestive tolerance permits, they replace the skimmed lactic acid milk by the whole lactic acid milk. In order to make the formula smooth, they have mixed the lactic acid milks with barley water. The resulting mixture has an attractive appearance, and the barley water is a great aid in holding the mixture in even suspension. The barley water is made of a strength of from 0.5 to 0.75 per cent. Two simple methods have been worked out. In both, the milk is boiled first so as to have an uncontaminated fermentation. The first method is to warm the milk, which has been boiled and then cultured, and put it away, either in a fireless cooker or the ordinary child's ice box so frequently found in the household. If the cultured milk is put away in the evening at 85 F., in the morning it will be found to have undergone a proper fermentation with an acidity of from 70 to 90. To check further fermentation we put it on ice, or, preferably, rapidly bring it to a boil. During this boiling, active stirring with a Dover egg beater is essential to keep the curds fine and prevent clumping. This boiling renders the fermenting Bulgarian bacillus inert, and leaves a milk sour but sterile. The second method is still simpler. Take the milks, either skimmed or whole, and in the morning add the ferment (1 ounce of ferment to 31 ounces of milk) and put them away in a warm place till a convenient time the next morning. The acidity has reached about 170 to 190 by that time; dilute the skimmed or whole lactic acid milk with an equal amount of skimmed or whole sweet milk that has been boiled, and the desired acidity of from 75 to 95 is obtained. Because the acidity is above 60, there occurs a

spontaneous fine clotting of the added sweet milks with a resulting homogeneous, smooth, clotted mixture. This mixture of lactic acid and sweet milks is then boiled or not, as desired. It is then further modified, as the case demands, and put away on the ice. Given a mixture of the proper acidity, infants very quickly seem to like it and furthermore, those with rebellious stomachs retain it nicely. The effect on the stools is marked and quickly obtained. The foul, putrefactive odor, so common in this class of hospital case, promptly ceases, and the stools become even, smooth, and of good color. The infants seem rapidly to become less toxic, as is shown by the disappearance of various signs and symptoms.

Chronic Abdominal Pain. — Edward Beansly, after calling attention to the difficulty encountered in determining the cause of pain, especially in the case of the viscera, says that in spite of all that has been learned from physiologists as to the innervation of the internal organs and the manner in which painful impressions arising within them are referred to definite skin areas supplied by corresponding somatic nerves, we are far from being able to assign to a definite organ many of the various internal pains for which patients seek explanation and relief. For the present clinical experience and circumstantial evidence must be relied upon. This is particularly the case with pains which are referred more or less vaguely to the abdomen. The classification of such pains as "acute" and "chronic" is ambiguous and misleading, because it confuses intensity with duration. The writer discusses the types of pain due to the several organs, the methods of diagnosis, gives special attention to appendicitis, viceroposis and intestinal stasis, and exploratory operation.—*British Medical Journal.*

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THE PREVENTION OF MALARIA.

Why is malaria allowed to cost on an estimated average 1,130,000 deaths and more than 100,000,000 cases of illness every year in India alone? Why does that country continue to pay its annual bill of \$284,000,000 for the privilege of having malaria? Why do many other countries also pay their continual tribute? For India, is only one of a great number of nations which fall within the malarial zone. Malaria in mild form is distributed almost all over the known world; and in its malignant form, according to Dr. Wickliffe Rose, the general director of the Rockefeller International Health Board, "it belts the globe in a broad zone including tropical and semi-tropical regions." Furthermore, more than half of the inhabitants of the earth live where infection is prevalent.

The answer is that until recently the cost of adequate anti-malaria measures has been considered too great, except in cases where the elimination of malaria was an absolute necessity, to be accomplished regardless of expense, and in large cities where a dense population makes the per capita expense relatively light. A case of the former type was that of the Panama Canal Zone, where for five years, the annual per capita cost was \$3.65—a heavy tax, but insignificant in comparison with its importance as a part of digging the canal.

In Port Said satisfactory malaria control was secured at an annual cost of 10 cents per capita. But Port Said has 100,000 inhabitants, a population large enough to bear a total expenditure which would be prohibitive for towns of from 1,000 to 5,000 inhabitants.

Recent tests, however, in Arkansas and Mississippi have proved that malaria control is economically feasible in towns of 1,000. Four methods were tried, anti-mosquito measures, screening of houses, administration of immunizing quinine, and attacking the parasite in the blood of the human carrier. All gave excellent results. At Crossett, Arkansas, a lumber town of 2,129 inhabitants where climatic conditions and abundant breeding places favor the propagation of anopheles, and where about 60 per cent of all sickness was due to malaria, which was present in endemic form, the first experiment was tried, an account of which, as of

the others, has been given in full by Dr. Rose in the Journal of the American Medical Association for November 8, 1919.

Pits and shallow ponds were filled or drained. Undergrowth was cleared away from the edge of running streams, their banks were trimmed, and they were held to narrow channels, with, of course, a swifter current. Other places which could not be drained or filled were cleared of vegetation, opened up so as to allow access to small fish (natural enemies of mosquitoes), and oiled weekly with road oil, either by means of automatic drips, or with a knapsack-type sprayer. All artificial containers were removed from the vicinity of the homes, and water barrels on bridges were treated with niter cake. The work was under the supervision of a trained man, and was carried out in a thorough-going manner.

The first result was the apparently almost complete elimination of the mosquito. The actual reduction in malaria, as shown by parasite indices from May to December, 1916, was 72.33 per cent.

In 1915, there had been at Crossett 2,500 calls for the services of the local physicians in malaria cases. In 1916 there were but 741; a reduction of 70.36 per cent.

Crossett was convinced of the value of anti-malaria measures. It took over the work of mosquito control, and in 1917, succeeded in reducing the number of doctors' calls to 200—less than one a day. In 1918 this was cut still further to 73. In three years Crossett had eliminated 97.1 per cent of its physicians' calls for malaria.

And what did this cost Crossett?

The per capita cost of the work the first year was \$1.24, omitting overhead expenses which could not properly be charged against the campaign. The total cost for 1917 was 63 cents per capita; and in 1918 Crossett was kept virtually malaria-free at an expense of 53 cents for each inhabitant. Five other towns were similarly treated with virtually the same results.

The second method—screen houses—was tried in 1916 at a group of plantations along the shore of Chicot Lake, Arkansas. This section was infested with mosquitoes, and had a high malaria rate. Most of the houses were negro cabins, often poorly constructed, and difficult to screen. Nevertheless,

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all of the openings in the house were covered with 16-mesh galvanized wire cloth. The tenants were also shown how to keep the screens in good condition, and were warned of the danger of exposure to mosquitoes outside at night.

From May to December the reduction in malaria, based on the parasite-index method, was 70.6 per cent. The average cost of screening each house was \$14.59, and, as the screens easily lasted two years, the average annual cost was \$7.30, and the cost per capita \$1.75.

In another group of plantations, which lay along a sluggish bayou where mosquitoes bred plentifully, the immunizing quinine method was tested. Each adult in the community was given 10 grains of quinine daily—five in the morning and five in the evening—for two successive days each week. For children under 15, the dose was one grain for each three years of their age. Parasite indices taken in May and December of the year 1916 showed a malaria reduction of 64.45 per cent, at a per capita cost of 57 cents.

The final method of malaria control is to destroy the parasites in the blood of the carriers. This was first suggested by Dr. Robert Koch, the famous German physician and discoverer of the tubercle bacillus, during a visit to Italy in 1898, and first demonstrated by him in Stephansport, German New Guinea, in 1900, where he materially reduced the malaria rate in this little town of 734 persons.

During 1916 and 1917 this method was tested among more than 30,000 people in Bolivar county, Mississippi. Ten grains of quinine a day for eight weeks was found sufficient to sterilize persons to whom it was administered. the blood of about 90 per cent of the

In 1918 the test was applied to Sunflower county, Mississippi. "This area," says the report of the experiment, "like the delta region in the heart of which it lies, is level, low-lying, and covered at frequent intervals with a net-and-patchwork of sluggish streams, bayous and samps . . . a typical rural area." About 9,000 people live in the 100 square miles selected for the demonstration: 1,000 in the town of Ruleville and 8,000 on the cotton plantations.

There are about four times as many negroes as white people in the test area. From one-third to three-fourths

of the people on the plantations are estimated to have one or more attacks of malaria annually. Of an annual doctors' bill of \$4,000 for one plantation with 600 tenants, \$3,000 was chargeable to the one disease. A census was taken, showing that 40 per cent of the rural population had had malaria within twelve months, and that, of the remaining 60 per cent, 22 per cent had the parasites in their blood. All persons who had had malaria, and who were carrying the parasites, were given 10 grains of quinine a day for eight weeks.

Although no reliable figures are available as yet, it is estimated by the directors of this work that approximately 80 per cent control has been established over malaria.

These experiments point the way to action. In South Georgia the American Red Cross has been conducting an intensive anti-malaria campaign, in co-operation with the State Board of Health, the Georgia Association, the U. S. Public Health Service and several large corporations. The tests have shown that where mosquito control is feasible, it unquestionably is practical. Taking into due consideration the safeguards with which scientific generalizations must be hedged, it may safely be said that people do not have to have malaria if they do not want it, and that it will pay them, both in direct saving of money and in greater efficiency, to put into effect one or more of the anti-malaria if they do not want it, and that is the willingness to be shown, and expert advice. The one must come from the people, themselves, but the other is to be had for the asking.

Immunity Following Influenza.

One of the debated points in connection with influenza concerns the duration of immunity following an attack. Some have claimed that influenza produces no immunity, others that it produces an immunity which is of brief duration, and still others that it confers a resistance to the disease which lasts over several years. Shortly after the 1920 epidemic subsided, the Surgeon-General's office requested army surgeons to investigate the data available in army hospitals bearing on this point. The consolidated reports just published in the Medico-Military Review, issued by the Surgeon-General's

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Office, represent the conclusions in regard to 22,505 soldiers who were exposed to influenza during the 1920 epidemic and including 5,411 soldiers who had influenza during 1920. Of the 22,505 soldiers exposed, 3,397 had had influenza in 1918. Of these, 718 had a second attack of influenza in 1920. Thus, 24 per cent. of all who were exposed had influenza during 1920, and of those who had influenza, in 21 per cent. the attack was a recurrence. This approximate equality in percentage leads to the conclusion that if any immunity at all is conferred, the immunity is of only slight duration.—*Jour. A. M. A.*, Sept. 18, 1920.

Dietary Justice to the Peanut.

The statistics of the peanut crop in the United States attest the growing popularity of the product. For many years peanuts were eaten essentially as "extra" foods, like candy and other sweetmeats. Latterly, they have begun to claim a more substantial place in the diet. Under the appealing designation of peanut "butter," the ground peanuts are finding widespread use as a palatable, wholesome food. Peanut oil is now expressed in large quantities from shelled peanuts, and has received commendation. From the resulting press cake, peanut flour has been prepared by grinding. Peanuts are unusual in containing a considerable proportion of protein along with both fat and carbohydrate. Water-soluble vitamin is also not lacking. Experts in the Office of Home Economics at the U. S. Department of Agriculture (1) have shown that the nutrients of peanuts are easily digested by man. Johns and Finks (2) of the same department have given an added worth to the food by demonstrating convincingly the high physiologic value of the peanut protein. Various investigators have demonstrated that bread made from wheat flour of current composition is inadequate as the only source of protein in the diet. The government workers have found, however, that bread made with a mixture of 25 parts of peanut flour furnished adequate proteins for normal growth of experimental animals. The proteins of the peanut bread were utilized for gain almost twice as well as those contained in wheat bread. This

does not mean that the familiar "staff of life" should be abandoned or regularly diluted with peanut flour; it does, however, put a stamp of real nutritive merit on a food product that many a physician still thinks of solely in terms of a trouble maker for digestion.—*Jour. A. M. A.*, Aug. 28, 1920.

Temperature Factor in Determining Age of Maturity Among Eskimos.

Vilhjalmur Stefanson, New York (*Journal A. M. A.*, Sept. 4, 1920), ascribes the early maturity of Eskimo girls (tenth to thirteenth year) to the fact that to all intents and purposes the typical Eskimo lives under tropical or subtropical conditions. He spends most of the winter indoors in a temperature of from 80 to 90 F. Even when he goes out, the cold air does not have a chance to come in contact with the body, except for the limited area of the face. When an Eskimo is well dressed, his two layers of fur clothing imprison the body heat so effectively that the air in actual contact with his skin is always at the temperature of a tropical summer. It is true, therefore, that while an Eskimo is indoors his entire body is exposed to a local climate as warm as that of Sicily, and when he is outdoors he carries that climate about with him inside his clothes and applicable to 90 or 95 per cent. of his body area.

TREATMENT OF THE PAROXYSM OF ASTHMA.

The attention of our readers is invited to the brief article on "Adrenalin in Medicine" which will be found in the advertising section of the current number of this journal. While, obviously, this space is purchased for advertising purposes by Messrs. Parke, Davis & Company, it has been put to a novel use by the publication therein of a scientific essay of unusual merit in which a vexatious problem is discussed.

Whatever intelligence the future has in store on the pathology of asthma, the present state of our knowledge justifies the use of any dependable therapeutic measure for the relief of the acute paroxysm. Morphine is objectionable for reasons that are generally accepted. *Per contra*, Adrenalin does

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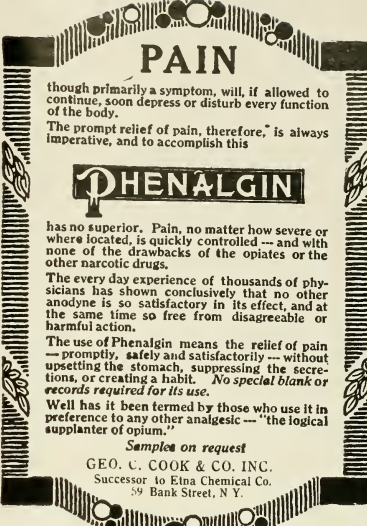
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Tuberculosis Clinic.

For a long time workers engaged in the fight against tuberculosis have realized that early diagnosis is the most important step in the cure of the disease.

For the last six years a clinic has been held at the State Sanatorium every morning, Sunday excepted, between the hours of 8 and 11 A. M., where residents of North Carolina could be examined for tuberculosis without charge. The services of this clinic have been sought by such a large number of people that it became necessary to require an appointment for examination as only a limited number could be examined each day.

In order to provide an additional opportunity for free examinations for those desiring it, the State Board of Health, the American Red Cross and the North Carolina Tuberculosis Association are co-operating by holding diagnostic clinics at any point in North Carolina where six or more desiring an examination can be gathered. The clinic physician, Dr. J. L. Spruill, is furnished by the North Carolina Tuberculosis Association. He is a skilled tuberculosis diagnostician, having been for three years clinician for the State Sanatorium. The nurses are furnished by the State Board of Health and the American Red Cross, and have a wide experience in public health nursing in the State.

Since May this year clinics have been held in Burke, Edgecombe, Madison, Swain and Washington counties, and in the cities of Asheboro and Spray. During these clinics 721 examinations were made, of this number 248 were found to have tuberculosis. One hundred and

seven showed signs but had no definite symptoms and further examination by the aid of the X-Ray and tuberculin tests were advised. Three hundred and forty-eight were found to be free of the disease.

Towns and counties desiring to hold clinics may secure appointment by applying to the North Carolina Sanatorium, Sanatorium, N. C.

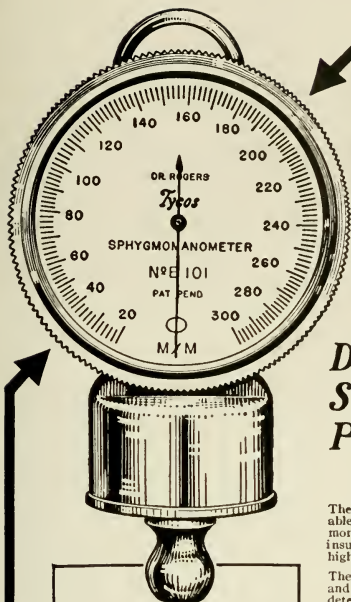
Diphtheria Antitoxin.

The administration of diphtheria anti-toxin has reduced the mortality of diphtheria in twenty-five years nearly 75 per cent. Despite this valuable means of passive immunization, despite control through quarantine and intensive culturing, there has been during the anti-toxin era in the United States only an approximate 30 per cent incidence reduction in the disease.

This continued frequency places a large measure of responsibility upon the parents and guardians of our child population, questions the methods of public health officials and reproaches the ideals of the medical profession. Bernard Carey, writing on "Diphtheria, the Uncontrolled" (Boston Medical and Surgical Journal, July 24, 1919), says that ignorance as to the possibility of a sore throat being diphtheria, and the neglect to call a physician appears to be the largest single factor. If this is the case, then by suitable educational propaganda it must be made as evident to the layman as it is to the medical man that the mortality from diphtheria is almost in direct proportion to the delay in calling the doctor and the administration of sufficient anti-toxin.

Some of the responsibility lies too with health authorities and the doctors themselves. There is no doubt that a few physicians still diagnose diphtheria by the odor or by the presence of a membrane, some who wait for a laboratory diagnosis of diphtheria before administering anti-toxin, some who do not use large enough primary doses; and some do not have the courage of their convictions to inject anti-toxin intravenously in severe cases or those seen late in the disease.

In 1905, Dr. Williams restated three rules concerning the use of diphtheria anti-toxin which he had presented to the Massachusetts Medical Society



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some years before, and which he felt still held good: (1) Get a good anti-toxin. (2) Give it early. (3) Give enough of it. And after fifteen years, they are still the epitome of efficient anti-toxin therapy, with an added (4) Use the intramuscular and intravenous methods in injection. By their strict, or one might well say their stricter enforcement, a forward step in still further decreasing the incidence and mortality of diphtheria can be brought about.

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An equal part of common sense

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One part of rare propriety,

Mix with a gracious share

Of living above gossip's tongue,

And free from sordid care.

Next, with a share of piety

Mix with a cheerful heart,

Of love of beauty, and good taste,

And labour—each a part.

With a pure conscience stir these things,

Blending them well together;

Warm them with love, and they will rise,

In any kind of weather.

If you but try it fairly, now,

You'll find this ancient plan

Will make a free and happy soul—

A perfect, all-round man!"

Inguinal Hernia of the Uterus.

Dr. H. A. Royster in the Southern Medical Journal reports the case of a colored woman 45 years of age who gave the following history:

She had been married twice but had never been pregnant. Menstruation, which was established in her fifteenth year, occurred every twenty-eight days but had always been vicarious, the flow

coming from the nose. During her fourteenth year of age a lump appeared in the left groin but gave rise to no symptoms and was therefore disregarded. Not until her forty-fourth year did this mass cause trouble. At that time it increased rapidly in size in a period of twelve months and its growth was associated with pain and discomfort.

Examination revealed a swelling in the left inguinal region the size of a man's fist—hard, tender, irreducible, and only slightly movable. The vagina was normal but no cervix presented. On bimanual palpation no internal pelvic organs could be made out.

Operation revealed a hernial sac containing a uterus somewhat larger than normal in which was a fibroid tumor the size of a billiard ball. The pedicle of the entire organ consisted of a well-developed left tube and ovary and the broad ligament, all of which were inside the sac. The specimen after removal showed complete absence of the right tube, ovary, and broad ligament.

The author follows this case report with a review of the literature, referring first to Cranwell's collection of 45 cases. In at least 32 of these the condition was congenital in origin. To this group Royster adds Oge's collection of 25 cases, Sutton's group of 5 cases, and 1 case each reported by Krug, Jopson, Parker, Upton, and Makkas. In Oge's group 2 of the herniae were in the femoral ring, 1 in the obturator foramen, 3 at the umbilicus, and 19 in the inguinal region. Nearly all of the inguinal hysterocles were on the left side, this being explained by Oge as due to the fact that the volume of the uterus was less on the left side and the uterus had descended early when the canal of Nuck was most widely open. Makkas pointed out the striking frequency in all forms of herniated uteri of associated malformations of the genitalia, chiefly the bicornate or bipartite uterus and often an associated vaginal atresia. The case reported by Makkas was that of a woman with a bilateral inguinal hernia, each hernial sac containing a small uterus. This frequency of associated genital malformations and hysterocle indicates an etiological connection between the two conditions.



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This program, decided on after the signing of the armistice, aims to concentrate Red Cross effort on public health work in this country. Much has already been done. Last year more than 30,000 disaster victims were given assistance, more than 26,000 men, still in hospitals as the result of the war, had Red Cross service, 92,000 women and girls completed courses under Red Cross nurses in home care of the sick. Community nurses have been appointed, First Aid and Dietetic courses given, Health Centers established—in short, the Red Cross had endeavored in every way possible to carry out a nation-wide campaign against disease.

But to continue, it naturally needs the continued support of its members. Last year, when the organization was in the transition stage between war and peace work, ten million, exclusive of the fourteen million juniors, renewed their memberships. This year, with the peace work in full swing, the Red Cross asks each of these members to pay his dollar and join for another year. It asks all those who, for whatever reason, did not join last year, to become members now. For it desires to have the whole American people standing solidly behind it in the fight for a healthier and happier America.

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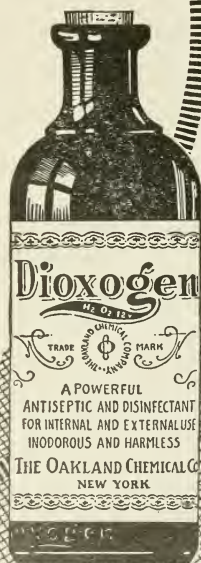
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Committees Elected.

Scientific Work—Dr. E. J. Wood, Wilmington; Dr. Richard N. Duffy, New Bern; Dr. C. A. Shore, Raleigh.

Publication—Dr. P. B. McCain, Sanatorium; Dr. C. A. Julian, Thomasville; Dr. W. L. Dunn, Asheville.

Obituaries—(Continued) Dr. Arch. Cheatham, Durham; Dr. E. G. Moore, Elm City; Dr. F. R. Harris, Henderson; Dr. N. D. Bitting, Durham; Dr. B. O. Edwards, Asheville.

Public Policy and Legislation—Dr. H. A. Royster, Raleigh; Dr. L. B. McBrayer, Sanatorium; Dr. Cyrus Thompson, Jacksonville.

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Original Communications

SOME OBSERVATIONS ON PRESENT STATUS OF GALL-BLADDER SURGERY.

By J. W. Tankersley, M. D., F. A. C. S.,
Visiting Surgeon St. Leo's Hospital,
Greensboro, N. C.

It was comparatively a few years ago that the first operation was performed on the gall bladder, since then they have run into the thousands in single clinics. When, during abdominal operations, the surgeons began to explore the abdomen before closing, large numbers of gall stones were found accidentally that had apparently caused no symptoms, again in operating for gall-stones many were found that did not have stones. Obviously we came to the conclusions that all symptoms were not caused by stones, and that other factors were proving more important than the mere mechanical irritations, consequently we have now come to regard gall-stones as less important and secondary to an infection.

Function of the Gall-Bladder.

The role the gall-bladder plays is not well understood. Some animals as the deer, horse and several others have no gall-bladder and in these cases the bile canals are very much enlarged. It is possible that this takes care of the overflow as the result of the closure of the sphincter of Archibald or Oddi during the distentions of the duodenum with gas, overeating or other causes. It is well known that the acid from the stomach causes severe contractions of the sphincter muscle, so in hyperacidity we may have tonic contraction blocking the outflow of bile. In health the gall-bladder is capable of overdistention to several times it's normal size without

consciousness on the part of the patient but this is not true in disease of that organ. It is composed of contractile tissue and acts as a reservoir of bile, pumping it into the intestines rhythmically at the rate of an ounce per hour, contractions occurring every 6 to 8 seconds. I believe it is quite true that bile undergoes some modification in the gall-bladder but just what modification that is, I am open to conviction. Several theories have been advanced but Flexner's seems the most tenable. He claims that mucin and nucleo-proteins are secreted in the gall-bladder which renders the bile less irritating to the pancreas. Robinson says, the pancreas is involved in 60% of gall-bladder cases while Quenu and Duval put it at 40 to 50%, how it is involved is still a mooted question, some saying through blocking the ampulla with stones while others, especially Deaver, claims it is through the lymphatic system, certainly it is that pure bile injected into the pancreatic or duct of Wirsung will cause a pancreatitis, usually of the hemorrhagic type, and that this is caused by bile salts especially the taurocholate. Hiava has shown as far back as 1890 that gastric juice injected into the pancreatic duct will cause pancreatitis. However, bile seems to exert destructive action on all tissues as seen around margins of wounds where bile is allowed to flow over them. This tissue disintegration is not an autolysis but apparently chemical in action.

Pathology of the Gall-Bladder.

As gall-stones so frequently drew our attention to the gall-bladder we naturally began to hunt the cause of stones. Stones may be composed of cholesterol alone, bilirubin-calcium or a combination of any of these, usually cholesterol

predominating. Attenuated bacteria induce mild changes in the epithelium of the bile tract resulting in the formation of myeloid bodies (Cholesterin) with the subsequent freeing of this debris, which increase the cholesterin content of the bile favoring the formation of cholestrin stones.

Healthy bile does not contain bilirubin-calcium, but as the result of bacterial irritation, or possibly other causes not yet understood, the bili-rubin combines with the calcium to form an insoluble base. This class of stones may be found in the smallest bile tracts, I have seen them the size of a pea imbedded in the liver. From the above it is deduced that gall-stones are the result of an infection, usually of a low grade. This infection once occurring in the gall-bladder thereafter showing an affinity to this region, as shown by Rosenow of the Mayo clinic. Formerly we were taught that infection was carried up the bile stream from the duodenum. While this is possible under unusual circumstances few would now advocate anything but an invasion through the blood stream or lymphatics. The infection occurring in the walls of the gall bladder may or may not give rise to stones but what in my mind is more important than the formation of stones is the frequency of pancreatitis as mentioned above, which symptoms may overshadow those of the gall-bladder and clear up when the cause above is removed. The form of bacteria most frequently found are the staphylococci, streptococci, typhoid, coli communis and even the influenza bacilli, these bacteria seemingly do not invade the gall-bladder until the virulence has reached a low grade and thereafter they display an affinity to the gall-bladder. Gall-bladders have been removed during the quiescent period and found to be the hosts of innumerable bacteria. Rosenow has suggested that the periodic exacerbations are due to a resumption of activity on the part of the offending organism when the defensive mechanism was impaired.

The Cause of Symptoms.

A normal, healthy gall-bladder, receiving its ounce of bile every hour, is able by muscular contraction to pump it through the duct against the resistance of the sphincter of Oddi and the pressure in the duodenum. If diseased the internal pressure and muscular ef-

fort to expel the contents is painful. At least $\frac{1}{4}$ of the diseased gall-bladders that come to operation do not contain stones though the symptoms may point to them. Hyperplasia from infection possibly causing broadening and thickening of the Heisterian valves may so obstruct the cystic duct when the circular and longitudinal muscles contract that the duct is occluded and simulate gall-stone colic. What then does give rise to symptoms? The infection in the walls of the gall-bladder, the dark sorghum-like bile which does not properly functionate, the overdistended inflamed gall-bladder, mucous or stone lodging in the duct, adhesions to adjacent organs, inflammation of the Heisterian valves causing blocking or pressure in the cystic duct and the frequent accompanying pancreatitis.

Operative Procedure.

Deaver says, if there is any question in abdominal surgery more difficult to decide with finality on the basis of incontrovertible evidence than the problem of cholecystectomy vs. cholecystotomy he is not aware of it. When a surgeon of his authority, backed by several thousand cases, speaks, my personal conviction based on a limited number of cases carries no weight and I can only give comments on my cases as they seem to me. Practically there is only the choice of choecystectomy or cholecystotomy. I know of no operation requiring more careful consideration of all factors looking to the ultimate return to health of the patient. A thorough familiarity with the pathology of the gall-bladder is a necessary requisite, for here we have to base our decision on the microscopic pathology, needless to say this comes with experience. Inversely the mortality rate will vary, though statistics here are fallacious owing to the choice or procedure of various operations, some draining only mildly diseased bladders while others drain the badly diseased and poor surgical risks. However, the mortality rate is nearly equal under given circumstances. The mortality rate has been materially reduced for most operations within the last few years, witness Deavers rate of 11% a few years ago to 5% at present. If cholecystotomy would cure all cases, or even a majority, the solution would be more simple, but simply draining the gall bladder will not cure infection in its walls, neither does it prevent the

re-formation of stones, even granting that the gall bladder has marvelous powers of recuperation. I believe in certain cases of acute infection of the gall-bladder draining will restore the mucosa to normal, provided we drain long and well. I have tried this and seen others try it repeatedly and have followed the patients for years. When the inflammation becomes chronic I do not believe simply draining will cure, then the bacteria have become too permanently located in their new home deep in the tissue and it is this class of cases that most frequently comes to operation. A certain per cent of failures to cure or relieve symptoms inevitably results in any group of operations, otherwise surgeons would not be constantly devising new methods and operations. 1189 re-operative cases at the Lankenau Hosp., 65% occurred after cholecystotomy and were traceable directly to failure to remove the gall-bladder (Deaver). Therefore from the standpoint of end results any gall-bladder that shows evidence of infection in its walls and involvement of the glands at the junction of the ducts had best be removed. This embraces the so-called mulberry gall-bladder, all thickened walls above the normal and those with cholesterol or calcium deposited in the mucosa, whether or not stones are present. Naturally a recurrence of symptoms here would be harder to overcome but being mostly mechanical in nature can be materially reduced by care and dexterity of the operator. I am coming more and more to believe that where there is the slightest microscopical evidence of infection in the walls of the gall-bladder cholecystectomy is the operation of choice, reserving cholecystotomy for those cases with stones without apparent infection and those whereby a more radical procedure would very possibly sacrifice the life of the patient, advising that a cholecystectomy be done at a later date when the patient may be in a better position to withstand the operation. In quite a few cases I have been surprised to find an almost complete clearing up of the inflammatory detritus around the gall-bladder, making the secondary operation of cholecystectomy a simple matter. Whether we remove the gall-bladder from above downward or below upward is immaterial, the operator should follow the method easiest to him, personally I pre-

fer to remove them from below upward, ligating the cystic artery and duct first.

Wayne Babcock during the last few years has been anastomosing the gall-bladder to the stomach in preference to removing it and in a personal conversation reports good results. He does not hesitate to do this operation even in badly infected gall-bladders and I believe follows it as a routine in ulcers of the stomach.

What Are the Effects of Removal of Gall-Bladder?

Immediately following its removal there is paralysis of the muscle of the sphincter of Oddi as a result of the steady pressure of bile in the duct. This relaxation permits of a steady flow of bile which in turn helps to drain the pancreas. In the course of about 60 days the common and hepatic ducts as far as the liver, have become markedly enlarged, in other words they are apparently trying to compensate for the loss of the bile reservoir.

Apparently man is well able to live and thrive after the loss of this organ, certainly so for 15 years, for cases have been followed for that period and are still living and doing well.

307 Dixie Bldg;

ENDOCRINE GLANDS

By H. H. Newman, M.D., Salisbury, N. C.

History.

Up to the final quarter of the last century, the attention of physiologists was directed almost entirely towards the nervous control of the various functions of the body. The activities of voluntary muscle, smooth muscle and of glandular organs could be influenced by stimulating the proper nerves, and this appeared to be the most important, if not the sole, means by which the body controlled and correlated the functions of its component parts. It is true that in 1849 Barthold had shown that the body changes which follow the castrations of young cockerels could be prevented by implanting the testical at

Read before the Ninth District Medical Society at Mooresville, N. C., October 12, 1920.

some distant part of the body, and that birds operated upon in this manner developed the vocal powers, the desire for combat, the comb and sexual instincts of normal cocks. This decisive demonstration of a chemical control of development by the sex glands made little impression at the time, however, and the view held sway that the chemical processes of the body consisted solely in a building up and breaking down of various tissues, in absorption, combustion, excretion and similar processes.

At the present time, however, we recognize that the body functions are regulated not alone by nervous influences, but also by chemical substances that pass from the tissues to the blood stream. We have seen, for example, that carbon dioxide and other waste products of an acid character exert a preponderating influence upon the activities of the respiratory center and thus upon the respiratory movements; that pancreatic tissue, even when separated from its nerve supply, exercises a profound effect upon carbohydrate metabolism; and that pancreatic juice is secreted after the injection of secretin, a substance that can be prepared by the action of acids and soaps upon the duodenal mucosa. To such substances that are derived from one organ and that influence another after passage into the blood streams, Starling has given the name of chemical messengers or hormones.

With the discovery that certain glands possess ducts and that characteristic secretions escape through these ducts, the functions of these glands seemed well on the way to solution. But the functions of certain other gland like organs which lacked secretory ducts remained a riddle. Among these latter are the thyroid, the parathyroids, the thymus, the hypophysis, the pineal and the adrenals. To Brown-Sequard belongs the credit for having impressed the medical world with the view that all of the glandular organs, be they with or without ducts, may give off to the blood certain substances that are necessary to the welfare of the body as a whole. The essential correctness of his conception is now generally recognized, and the glands that possess such functions are called the glands of internal secretion. These include not only the ductless glands just enumerated, but certain others which elaborate

both an external secretion that escapes through the duct and an internal secretion that enters the blood. Among the glands that possess this double function may be mentioned the liver, the pancreas, the duodenal mucosa and the sex glands.

Evidences of Internal Secretion.

Direct and conclusive proof that a particular gland supplies an internal secretion to the body is furnished, if peculiar, physiologically active substances can be demonstrated in the blood or lymph that leaves the gland in question. Proof of this character has been furnished for only one gland of internal secretion, the adrenal. It is evident, however, that a failure to find an active substance in the blood that leaves a gland does not demonstrate the absence of internal secretion; for the secretion poured out may be greatly diluted by the large quantity of blood and of lymph that comes from the gland, and may thus escape detection by any available method.

Next in order of value as evidence of internal secretion is the observation that the excision of the gland produces characteristic changes in the vital processes. If to this be added the observation that such changes may be more or less prevented or neutralized by implantation of the gland elsewhere in the body or by the administration of glandular preparations, then the evidence in favor of an internal secretion may also be regarded as conclusive. Demonstrations of this type have been furnished for the secretions of the pancreas, the thyroids, the parathyroids, the hypophysis, the adrenals and the sex glands.

Finally comes the study of the physiological effect produced by the administration by mouth or by the injections of glandular extracts and of other preparations derived from the glands. The demonstration of physiologically active principles in a gland of internal secretion suggests that similar substance may pass into the circulation under normal or pathological conditions and this possibility is strengthened if, under pathological conditions of supposed hyperfunction, the symptoms correspond to those produced by the administration of glandular substance. Such is the case, for example in Graves Disease and it is possibly also the case in diabetes insipidus that sometimes accompanies disease of the pituitary gland.

Conclusive evidence has thus been presented to show that these glands have a definite function, that is absolutely necessary to body metabolism and growth. Another interesting phase of the question is the effect of the secretion of one gland on other glands of internal secretion. This interrelationship is interesting and multiplies the complexities of the body in its self control and correlation.

Physiological Action of Endocrine Glands.

The normal activity of the individual gland can best be summed up as follows:

(1) The thyroid gland has to do with combustion, stimulation to the cerebrum, the vegetative or involuntary nerves. It has an inhibiting effect on the pancreas and a stimulating effect on the medulla of the adrenal and the post lobe of the hypophysis. Some think it has an inhibiting effect on the intermediate lobe of the hypophysis as there is hypertrophy of this organ, following excision of the thyroid.

The peculiar effect upon metabolism is thought to be due to an iodine substances, isolated as Idiothyryn. The relation of thyroid secretion upon combustion can best be stated as a fan to the fire. This secretion in excessive amounts is definitely toxic and manifests itself in a particular way. This will be discussed later.

Excision of the thyroid gland leads to a condition called Cachexia thyreopriva and eventuates in death in several weeks.

(2) The parathyroid glands have to do with calcium metabolism. It seems that this secretion is necessary to neutralize certain toxins formed in the body. Absence of this secretion following extirpation of the glands, leads to rapid convulsions and death. The infusion of calcium salts, will prolong life.

(3) The Thymus possesses a reciprocal relation between itself and the reproductive glands. Castration retards thymus atrophy. And thymus removal hastens the development of testicles. It is thought to assist bone formation. It increases nerve excitability. The thymus function has mainly to do with adolescence, as atrophy commences shortly following puberty. It hypertrophies following thyroidectomy.

(4) The pancreas through its internal secretion assists in carbohydrate metabolism. Lack of such secretion, allows the condition of hyperglycaemia and resultant glycosuria, diabetes mellitus.

(5) The internal secretion of the liver manifest itself through its actions upon glycogen (animal starch) and urea.

(6) The internal secretion of the adrenal gland is extremely interesting. Removal of this gland is followed by great prostration, muscular weakness, diminished vascular tone and rapid death. Injection of adrenal extract will prolong life. This extract is soon neutralized, through some unknown way, and therefore has only a very transitory effect, necessitating repeated injections. Personal observations place this time at 55 minutes. If the vagi are intact, adrenal extract will slow the heart beat and increase the blood pressure. It has a definite action in the metabolism of muscle, easily recognized by the great muscular weakness following diseases of the organ or lack of its secretions. The cortical portion of this gland may have something to do with body growth. It is the medulla or chromaffin tissue part of this gland that has most to do with its recognized function. This possesses a great similarity to the chromaffin portion of the hypophysis. Adrenalin is a stimulant to the sympathetic nerves, in that it causes relaxation of certain smooth muscles, namely, the intestinal muscles, the bronchial muscles (hence the aid in asthma, which is spasm of these muscles). Again like sympathetic nerve stimulation, there is constriction of the arterioles and contraction of the pregnant uterus. It tends to convert liver glycogen into glucose, causing diabetes.

(7) The hypophysis is divided into three component parts, the anterior lobe, the posterior lobe and the pars intermedias. The anterior lobe is of epithelial structure, derived from the nasopharynx and its secretions have to do with body growth, especially through its action on the long bones and face.

The posterior lobe is of nerve derivation, and stains yellow by chromaffin. It is very similar to the medulla of the adrenal gland in its action. It causes constriction of the arterioles, marked contraction of the pregnant uterus, influences carbohydrate metabolism. Stim-

ulates the adrenals and inhibits the thyroid. It causes and increases secretion of urine, diabetes insipidus and is a galactagogue.

The pineal gland is not essential to life. Workers in this field are disagreed as to its proper function. Some contending that it affects body growth and sexual development, others disagree.

The internal secretion of the sex glands exert a profound influence upon the development of the mind and of the body. The particular portions of these cells that function internally are the interstitial cells of Leydig in the testes and the corpus luteum cell in the ovary.

(8) Removal of testicles causes high-pitched voice, fat develops around the buttocks, development of unusual height, owing to an overgrowth of the long bones, due to delayed union of the epiphyses. The disposition of eunuchs differ from normal, in that they are less ambitious, more indolent, treacherous and cowardly.

(9) The ovaries produce a profound influence. Aside from the mental and body functions, they are associated with the menstrual function, the enlargement of the breasts and possibly the thyroid during pregnancy. Lack of this secretion, causes nervousness, skin flushings and ultimately increased weight.

Pathology of the Endocrine Glands

Diseases of the endocrine glands manifest their condition by hyperfunction, hypofunction and dysfunction.

"Beginning with the thyroid we see

(a) hyperfunction in the so-called Graves disease. Observation will usually detect struma, rapid pulse, exophthalmos, fine tremor in the fingers (10 movements to the second), nervous excitability, loss of weight, diarrhea, moist thin skin, heart irregularities, such as auricular fibrillations. The rapid heart action is due to stimulation of the accelerator nerve. Increased metabolism is evident. Interesting symptoms are the eye conditions. The protrusi bulbi is due to increased tonus of the smooth muscle of the septum orbitale. The Dalrymple's sign, is due to increased tonus of the Levator Palpebrarum, causing a retraction of the upper lid on fixation of eye and exposing the sclera. Von Graefe's sign somewhat similar to Dalrymple's and explained the same way, is lack of downward movement of the upper lid, following

such course of the eye. Moebius sign is lack of convergence. Here the eyes can not maintain position on a fixed point without one soon deviating. Joffroy's, absence of wrinkling of the skin of the forehead as the eyes look upward.

In mild cases, rest and medicinal treatment will suffice. I would suggest bromides and pancreatic extract medication. But surgical treatment must be resorted to in many cases. Here a portion of the gland is removed, with good benefits.

(b) Hypofunction of the thyroid is recognized by the familiar syndrome, of listless appearance of the face, mental apathy, falling out of the hairs, dry thick skin, sluggishness mentally and physically, clumsy movements. All metabolic processes are slowed. Growth of bone is markedly interfered with. Ossification centers at wrist and ankles fail to appear. It is the endochondral bone formation, rather than the membranous that is affected, hence the large heads and small bodies of the juvenile myxademas. Constipation is intractable. Amenorrhea in female and impotence in male are common. These symptoms are typical of the condition of myxedema or cretinism.

Feeding of thyroid extract causes improvement in the symptoms, but never restores entirely to normal the condition of the patient.

(c) Dysfunction of the thyroid must be considered in some of the atypical cases met, where there are some symptoms of hyper and hypo as well as indications of other endocrine glands.

(2) The parathyroid glands pathologically function only through a lessened secretion. The symptoms are of the nature of tetanic contractions, especially in children. These muscular contractions are mainly of the extremities and are unaccompanied by the loss of consciousness. There are trophic disturbances of the hair, teeth, nails and lens. Certain signs due to hyperexcitability of the nerves are characteristic, such as Trousseau phenomenon (the obstetrical hand contracture following pressure at the elbow) and Chovstek's phenomenon (contraction of the facial muscles following tapping on the facial nerve as feelings of tension, anaesthesias, in addition there are certain paraesthesias, as feelings of tension, anaesthesias, including analgesias. Tinnitus aurium may be present. There are trophic dis-

turbances, dermatographia, angioneurotic edema or erythemas. The nails may be fragile, the hairs fall out. The enamel of the teeth does not develop properly. There is a peculiar (perinuclear) cataract. Erb has noticed an increased electrical excitability of the motor nerves. The term "tetany" is applied to these peculiar manifestations.

3 (a) Hyperfunction of the anterior lobe of the pituitary gland gives rise to a condition called acromegaly. An unusual growth of long bone and development of facial bones. Gigantism is another term used for this conditions. The face is oval, the forehead appears narrow above the projecting eyebrows and enlarged orbits. The eyes lie deep in the orbits. The projecting chin is characteristic and the lower mandible greatly enlarged. There are cerebral symptoms, headache, etc. Optic atrophy with choked disc is common. There is enlargement of the sella turcica visible through X-ray examination. The external genitalia are hypertrophied, but there is diminution of libido and potentia. In women amenorrhea is an early condition. The thyroid usually shows certain abnormalities, struma and atrophy, whereas the thymus may be enlarged and there might be a complicating status lymphaticus.

(b) Hypofunction of the anterior lobe of the pituitary gland leads to a condition called Dystrophia adiposogenitalis. Frolich has described a particular syndrome: obesity and genital atrophy, visual disturbances (limitation of the visual field), excavation of the sella turcica. There may be signs of increased intracranial pressure, diabetes insipidus may be present.

There are no particular diseases referable to abnormal function of the posterior lobe, though it has very specific and definite action physiologically.

(4) Diseases of the pineal gland are mainly of the tumor or cystic type. The symptoms are the same as any intracranial tumor with the addition of certain pressure symptoms emanating from the hypophysis. The main indications of pineal disturbance are indicated by premature puberty and changes in carbohydrate tolerance.

(5) The most common disease of the adrenal is called Addison's disease. This is due to an hypofunction of the medullary portion of the adrenal gland. Among

the symptoms to be considered are great muscular weakness, melanoderma, nervous disturbances, as headache, neuralgic pains, dizziness, fainting spells, insomnia, mental depression. Outspoken arterial hypotension is a common finding. Digestive disturbances may be prominent.

Over-function of the adrenal as far as our knowledge concurs, is at an infant stage. Chronic arterial hypertension has been observed. Polyuria and hyperlygaemia are thought to be related to this function.

There are certain remarkable sexual syndromes dependent upon hyperplasia or tumors of the cortex of the adrenal gland. The congenital form, pseudohermaphroditismus. An early postnatal form, pubertas precox. And a late or adult form, suprarenal virilismus. You know of the "masculine women." Some of these patients show a strong sexual excitability. Women may grow moustache or beards. Long hairs may grow upon the back, the chest, the abdomen and the extremities. Mental changes are evident, such as egotism, overbearing tendency, irritability, a kind of mental hyperaesthesia.

(6) Disease of the thymus is not well understood. There is a condition of status lymphaticus or status thymico-lymphaticus that has given rise to much discussion, but no definite solution. Hypertrophied thymus and hyperplasia of the lymphatic tissue, with hypoplasia of the chromaffin system. The condition leads to sudden death. Symptoms of suffocation of children, with characteristic symptoms, as blue lips, upturned eyes, dilated pupils, engorged veins of the neck, the hands are clenched, the body is bent backward, a few convulsive movements appear in the face and the child becomes unconscious. The lividity gives way to pallor. If the attack is fatal, death occurs in a minute or two. There is a definite ratio between thymus size and lymphocytosis.

(7) Clinicians are beginning to recognize states of the body depending upon over function and underfunction of the endocrine portion of the sex glands.

(a) Symptoms of hypergenitalism or premature sexual development, including premature and excessive development of the external genitalia and of the secondary sexual characters, premature change of voice and excessive de-

velopment of the body as a whole. Malignant tumors of the organs or hyperplasias are found as the cause of these conditions. In the female we have the precocious menstruation. Cases of early menstruation have been reported at $2\frac{1}{2}$ years of age. The skeleton grows rapidly. Both sets of teeth come premature. The ossification centers appear earlier than normal and the epiphyseal line are closed at an early date. This latter factor may lead to lessened height than normal, despite the fact that the boy has been relatively tall in early childhood.

(b) States of Hypofunction of the sex glands are manifested by: (1) True eunuchs, (2) Eunuchoids and (3) Late eunuchs. In ancient times castration of males was a common practice. This was done for musical purposes. The symptoms depend upon the age of castration. When done early, the sexual organs fail to develop, the seminal vesicle and prostate remain small, the sexual impulse does not develop.

The eunuchoid type are those that have not been castrated, but have hypofunction of the sex organs. The genitals are hypoplastic. There may be undescended testicle. In both sexes those affected are usually sterile and lack sexual desire. Traumatism, syphilis or gonorrhea are thought by some to be the basis of this group. The diminution of the genitalia is striking. Libido and potency diminish the cremasteric reflexes are enfeebled. The skin of the face is pale and delicate. The hair of the head is dry. The secondary sexual hairs fall out. Masses of fat of peculiar distribution appear. The voice becomes higher pitched.

If done in later years, the main observation is marked atrophy of the prostate. In these cases sexual impulses need not change, at any rate for a long time, coitus may still be practiced, with the ejaculation of prostatic secretion. The psyche of eunuchs differs materially from normal men. They lack courage and the capacity for passion and for struggle that is normal in man. Some, however, maintain high intellectual powers. Some possess superior artistic ability. The average height of eunuchs exceed the normal. The arms and legs are very long. In some cases fat pudgy bodies have been observed. They are dull looking per-

sons. Their general attitude is relaxed, the gait heavy and clumsy. The thyroid is always small.

Not much is known concerning early spaying in females. You are all familiar with the symptoms of the menopause and artificial menopause..

There is a group of cases where several endocrine glands are involved in a sclerotic or an atrophic process. As examples I will cite, acromegaly combined with symptoms of Graves disease; Graves disease with adrenal insufficiency; myxedema or Addisons disease combined with genital disturbances and syndromes suggesting simultaneous involvement of the thyroid gland, the gonads and the chromaffin system.

Not much evidence has been published as to results from extracts of the different glands. Those that are best known I have mentioned above. I believe there is a great field for further work and that we can expect much beneficial therapy to emanate from knowledge of this great system. We have had before us for consideration a system that is absolutely indispensable for life and one that has a wonderful, but little understood functions to perform. I trust I have not wasted your time.

ACUTE ILLNESS OTHER THAN INTESTINAL DISEASES.

By Dr. W. C. Verdery, Fayetteville, N. C.

It is not my intention to bring within the scope of this paper the feeding of babies and children, who primarily are ill with digestive disturbances, like acute or chronic intestinal and gastric indigestion or acute or chronic ileocolitis. Likewise, it is not my purpose to include "the difficult feeding cases," where poor digestion already exists, either from congenital weakness or as a result of feeding or bad hygiene or innate peculiarities of the baby, such as intolerance to fat, sugar, or proteins. To include these cases in my subject would take more time than is allotted to me. This paper will give consideration only to the feeding of infants and children acutely ill with diseases other than those of the digestive tract.

Read Before the North Carolina Fifth District
Medical Society.

The proper feeding of babies during acute illness and the feeding of those enjoying normal health are two entirely different propositions. Feeding is an important part in the treatment of every acute disease in childhood, especially so in infancy. It is much easier by proper feeding to prevent complicating disturbances of digestion than to allay them. In infancy the complication often turns the scale against the patient. It appears, on the face of it, as a self evident fact, that sick babies should be fed differently and more continuously than normal healthy babies. Their digestive capacity in acute illness, by the natural process of reasoning, will lead us to expect a weakness or a lowering of their digestive ability.

Fever has the same effect on the secretion of digestive juice lessening the quantity as it does on the skin secretion.

This expectation can be quite thoroughly substantiated by studying and properly interpreting Nature's efforts in babies who are acutely ill. Take the case of an acutely ill baby especially if that case be of a febrile character. The onset of vomiting is quite frequent; diarrhoea not uncommon while loss of appetite or a real aversion for food is rather constant and thirst in most cases well marked and demanding. I think it is fair to assume that the proper interpretation of Nature's efforts in such cases should be that the baby's stomach and intestines have, either wholly or in part, ceased their normal function, and Nature, coming to the rescue, endeavors to rid the system of food that can not be digested. Therefore, she promptly evokes vomiting and diarrhoea as a relief or assistance. It also appears logical to believe that the loss of appetite, so constant in these cases, is an effort on Nature's part to show that food should not be taken at this time; that digestion for the time being is practically nil and that food only aggravates an already bad condition. Again, the abnormal craving for water in such cases might fairly be considered an index to the importance Nature places in the value of having and continuing to have plenty of water in the body tissues. The ill effect of dehydration of tissues in babies is becoming clear cut in its importance to the observing physician, the more he studies it. Acidosis, severe and moderate grades of intoxication, and I might add acute inanition symptoms

and signs, are most assuredly intimately associated with dehydration of tissues. It is well to always remember that a baby can do without food, frequently to advantage, for some 24 to 72 hours, but it is a dangerous procedure to withhold or permit the non-intake of water, for the same length of time. A good slogan to adhere to in the treatment and feeding of sick babies is: More water, less food, and as little medicine as possible. These facts are accepted and well known to physicians, but it is astonishing to note that not infrequently they are either forgotten or the knowledge is not reasonably applied in some cases, the result being that a sequence of gastric or intestinal indigestion only too frequently complicates an already existing acute disease of some other organ or important tract in the body. Likewise, the improper consideration of these well known facts can be blamed for the frequent complaints from mothers that their babies can not digest cow's milk and their final decision to rear them on condensed milk or other proprietary infant foods.

Incidentally, it might be mentioned that well babies are quite frequently upset by starting artificial feeding with too strong a mixture of cow's milk. Instead of feeding on too strong a cow's milk begin with a weak formula and gradually accustom the digestive organs to a strong enough formula upon which the body will thrive. It should be remembered in this condition that if in approximately two weeks time a normal baby can be induced to digest a strong enough formula on which it will thrive, the physician will have done well. He will further have the assurance of knowing that he is feeding the baby what is generally recognized as only second best to that of mother's milk.

Feeding.

Generally speaking, unless the illness is due to disease of the digestive tract, all acutely ill babies and children might be fed in very much the same manner. There are a few essential facts that must be kept constantly in mind in the feeding of these cases:

1. *Less Food and More Water.*

In all acute febrile diseases, the baby should be given less food and more water than in health. In bottle fed babies this can be easily accomplished by simply increasing the dilution of the food. In breast fed babies less food can

be given by shortening the length of time at breast, lengthening the time between nursing and giving water freely between nursing hours.

2. *Fat Tolerance.*

Remember that sick babies tolerate fat very poorly and that this ingredient of food should be reduced or temporarily excluded. Also bear in mind that intolerance to fats lasts much longer than intolerance to the other ingredients, like carbohydrate and protein. Therefore, sick babies artificially fed should receive formulae made up of fat-free milk or skimmed milk, cutting 1 per cent, 2 per cent, or 3 per cent, as fats and carbohydrates are interchangeable for a short time, without being detrimental to the baby's health. The diet should consist largely of carbohydrates, as barley water, rice water, or gruel.

3. *Do One Thing At a Time.*

Do not attempt to cure all acute illness and at the same time fatten a baby; the two things are practically impossible of accomplishment at the same time. If the acute illness is not one affecting the digestive tract, be content, in your efforts at proper feeding, to prevent gastric or intestinal indigestion as a complication. If gastric or intestinal indigestion does complicate the already illness, I would advise ignoring the loss in weight and the number of calories in the food and direct sole attention, as regards the feeding, to correcting the digestive disturbance first, before taking up consideration of weight and calories. When this has been accomplished, then immediate attention should be given to the regular weekly, or bi-weekly, weighing and the number of calories contained in the food. Just here I would like to stress the importance of outlining the purpose and procedure of treatment to the mother. If you make it clear to her mind that the loss of weight of her baby is for the time being of secondary consideration, you will save much maternal worry and receive intelligent co-operation, where otherwise confusion, dissatisfaction and injustice to the baby will result.

4. *Regularity of Feeding.*

It is just as important to observe regular hours of feeding in cases of sick babies, as it is to carry out procedure with well ones. It is true that occasionally such regularity of feeding has to be ignored or temporarily abandoned

in some sick babies; ordinarily, however, food should never be given oftener than at 3-hour intervals, and very often 4-hour intervals are much better. This does not apply to the giving of water which has no limit as to the quantity or frequency, provided the stomach is not irritable. Stimulants when required can be advantageously given with as much water as is practicable. There are some cases of infants and children so acutely ill that they will refuse all food for several days and it is only with great difficulty that enough water can be introduced into their systems to prevent severe conditions arising from dehydration of their tissues. In such cases forced feeding or Murphy drip with 5% glucose solution will be found life saving and with any signs of acidosis 5% of soda bicarb may be ordered in the same way. If Lavage has to be resorted to, washing the stomach twice daily will be found of benefit; also the interval of feeding should be lengthened, at least 1 hour. In the use of the Murphy drip I have found that a baby's bowels soon become intolerant to glucose solution in higher than 5%. Also it appears to me that I have been able to get more glucose into my little patients when I have the Murphy drip put on for one hour and off for 3 hours.

Milk vs. Water. A common mistake that is made is to offer to give milk to the baby or child whenever it asks for water. This should never be done as it frequently disgusts the little patient with both milk and water and one loses more than is gained by such a procedure. If there exists a complete aversion for milk in any form, barley water, sweetened with saccharine for infants, or beef tea broth, and thin custards for early childhood, may be used. For children over 5 years of age raw eggs, beaten up with cherry wine, sugar and cracked ice are permissible. Orange juice may be allowed in most every febrile disease, but not given within two hours of a milk feeding.

Hunger is one of the best indications as to the time to increase the strength of baby's milk, or to lead an older child on to dry toast, well cooked cereals, soft egg, etc. The indication to increase the food is the hunger and not the fever of the patient. It seems reasonable to suppose that when nature returns the appetite, the digestive organs have had a sufficient rest to slowly take

up their normal function again. If easily digested food be added slowly without crowding and the appetite taken as a gauge to digestive ability, there will be very little likelihood of upsetting the digestive organs. In babies above one year of age and older, I have found buttermilk of great value in feeding any acute illness. It has the advantage of not forming curds in the stomach, as is so frequently the case when raw cow's milk is used, the reason being that the casein in buttermilk is a lactate of casein and the rennet of the stomach does not act upon it to coagulate it into curds. The reverse is true as regards the action of rennet upon the plain casein of raw cow's milk. If however, raw cow's milk be boiled for five minutes, the rennet of the stomach will not act upon it in such a manner to give trouble with curds. This is a point of value when a little patient dislikes the taste of sour milks and it becomes advisable to give sweet instead of buttermilk. Plain or sweetened Zwieback or dry toasted wheat bread can be advantageously used in feeding acutely ill babies or children over one year of age. These foods are strictly carbohydrates and are almost as digestible as barley water or barley gruels. It is often advisable to give carbohydrates this form when the little patient refuses the barley mixture. The combination of buttermilk and dry toast will be found a very safe and satisfactory diet for the average case over 1 year of age. If sweet milk boiled for five minutes has to be substituted for the buttermilk, it sometimes will be found advisable to dilute it 1-3 or $\frac{1}{2}$ with water, especially if the patient is under 5 years of age.

circumstances surrounding the individual who is asking for operation, the state of mind of the patient, and what benefit is apt to result from the procedure. The surgeon should not undertake the plastic unless he feels reasonably sure that he will obtain the benefit looked for. It is often far better to allow these unfortunate individuals to go their way rather than to undertake an operation which may put them in a depressed state of mind. These factors, of course, depend chiefly upon the correct individual judgment that the surgeon has of his own abilities. A surgeon should be able to so size up the situation that he could tell within reason how the final result will appear; but perhaps even a greater factor,—he should be able to size up how the cosmetic plastic will affect the patient's state of mind.

A cosmetic operation, especially where women are concerned, may be the greatest improvement upon nature, but after the whole procedure is closed and the patient is about to be dismissed, she will be dissatisfied because she believes that having undergone the operation, she should be a model of perfection for future generations of womankind. I recently had such a case, a case of a woman with a saddleback nose, where a cosmetic operation was done with most excellent result. The nose was made absolutely straight, but she was dissatisfied because her nose was not as pretty as her sister's. In this case, I did a very fine operation, but the patient's state of mind was not improved; therefore, I consider that I erred in doing the operation. I might just as well have operated on a piece of wood.

But on the other hand there are many patients who consult especially the rhinologist, who are very miserable and unhappy. All men are looking for happiness, and if the surgeon can make the stay of an individual upon this earth more pleasant; if he can raise their spirits, if he can make them optimistic, as to the future, no apology is necessary. He should do the operation. It is the duty of the high class surgeon to put plastic cosmetic surgery or plastic facial surgery (particularly bearing in mind the dreadful facial distortions caused by the war) it is his duty to raise plastic surgery out of the dregs of quackdom and place it on a plane that it so well deserves with the best surgery of the day.

THE PSYCHOLOGY OF PLASTIC SURGERY.

By Dr. Alfred Kahn, New York.

What is the present day status of the plastic facial operation for cosmetic effect? The skilled plastic surgeon feels it almost his duty to apologize for a fine piece of plastic work if it is done purely and simply to improve the patient's appearance, without regard to functional benefit.

The plastic surgeon, the rhinologist, the otologist, the oculist, are frequently called upon to do a cosmetic operation and to my mind they should study the

I have operated on numerous individuals. I have restored loss of function—I have cured disease by surgical means, I have removed diseased parts, but I do not know of any surgery that gives a new optimistic lease on life, that raises the state of mind from a state of depression, that provides as much happiness as a successful, well judged cosmetic plastic facial operation. 50 East 42nd Street.

A BIOGRAPHICAL SKETCH OF WILLIAM OSLER.

By Dr. J. P. Munroe, Charlotte, N. C.

Sir William Osler was born at Bond Head, Ontario, July 12th, 1849. His father was an Episcopal minister who was doing missionary work among the Irish immigrants in the country near his village home. His mother was a woman whose aristocratic English parents strongly opposed her marriage to the missionary preacher. She proved, however, a congenial and efficient helper in his missionary work. Osler, himself says, "I started life in the best of all environments, in a parsonage, one of nine children." Dr. Jacobi says of him: "It is no mean felicity to be born with the imprint of virtue." He was born on the birthday of William of Orange for whom he was named. The annual procession in honor of William of Orange was regarded by the children of the Osler family as commemorating the birthday of William Osler.

In order to secure better school facilities, his father moved to the village of Weston. After attending the village school he was placed in Trinity High School, where he came under the influence and tutorship of Rev. W. A. Johnson. Mr. Johnson was a man of high character, great learning and so impressed young Osler that afterwards when he wrote his text book on the Practice of Medicine, he was one of the three teachers to whom he dedicated this book.

Later, he attended Trinity College in Toronto and then the Toronto University and Medical School. While in the University he studied Divinity one year and it was his father's hope that he would enter the ministry. Here, again

he met another great teacher, Dr. Bovell, under whose inspiration and guidance he took up the study of medicine.

He next entered the Medical Department of McGill University in 1870, graduating from that University in 1872. During all his student and college life, he had shown great aptitude for Biology and Pathology. His graduating thesis was on the general subject of Pathology. His thesis contained so much merit and showed so much original research that he was awarded a prize.

Prof. Robt. Palmer Howard, dean of McGill University, publicly expressed the hope that someone would endow a chair and elect young Osler professor in charge, predicting that he would make a name for himself and for the University. In less than two years this hope was realized. After graduation, Osler spent two years studying in London, Berlin and Vienna. He then accepted the invitation to return to Montreal and take the professorship of the Institutes of Medicine. This included Physiology and Pathology. Osler, himself, has said that one should come into the practice of Internal Medicine by one of three routes, either Physiological Chemistry, Physiology or Morbid Anatomy. Osler, himself, came in through all three. His studies in London were largely in Physiology and Pathology, in Berlin largely Physiological Chemistry and in Vienna, chiefly clinical Medicine. Throughout his college course he was a constant user of the microscope. Indeed, it was his discovery under the microscope of small masses of molecules in his own blood which, under cultivation, yielded bacteria, that led Dr. Howard to make the announcement already referred to and recommend his election to a professorship in the University. He was only twenty-five when he became a professor at McGill. With characteristic modesty, he says, referring to his first course of lectures, that he ran out of material at the end of the fall term and was wondering what he should lecture about after Christmas, when good fortune placed in his hands a new German text book on Physiology. He said he memorized enough of that to get through the last half of the session with comparative ease. On beginning his work, however, as a professor, he announced that he must have his lab-

oratory equipped with microscopes. This hope was soon achieved and the work of that department was rapidly transformed into the modern, practical method of teaching Physiology and Pathology. The medical department of this institution was rapidly improved and the Canadians give Osler the large part of the credit for it.

In 1876 he was elected physician to the Montreal General Hospital and in this capacity he rapidly came to the front as a teacher of clinical medicine, although he still retained his professorship in Physiology and Pathology. It was a few years later that he characterized himself as a "plurist of the most pronounced sort" and says it was difficult to know what I did profess, quoting on himself Plato's saying "Full many a thing he knew, but knew them only badly." This was his attitude of mind when he decided to accept the narrower field of clinical medicine at the University of Pennsylvania.

He was at Leipzig in 1884 when he was invited to become a candidate for this position in Philadelphia. He was requested to meet Weir Mitchell in London to discuss the matter. Osler said, Boston measured men by brains, New York by Baw-Bees and Philadelphia by breeding. "Weir Mitchell's task was to test my breeding. He invited me to dine. We had cherry pie and I made the proper disposition of the stones, so the test was satisfactory."

In 1889 he accepted the chair of Clinical Medicine at Johns Hopkins Hospital. It was here that he did his greatest life work. Daniel C. Gilman, president of the University and Hospital, William H. Welch, Pathologist and William Osler, Physician in Chief, were the outstanding figures in originating and building a new order of medical school in this country, one in which bedside instruction was to be the basic plan of procedure. It is said that the general public of Baltimore, as well as the physicians of the city, were at first rather luke-warm towards the new institution. The heads of the hospital department had been chosen from other centers of medical education in the north, and there was no immediate bond of union between the hospital staff and the public, who naturally clung to their local medical authorities. A distinguished writer has said, "To no one more than to Dr. Osler, to his personal

charm and tact, no less than to his professional attainments, is due the credit of having broken the ice and established the most cordial relations between the general medical profession and the public of Baltimore and of Johns Hopkins Hospital. It was after three years of work there that he wrote his first edition of Practice of Medicine, which has been called his Magnum Opus. Many have called this the greatest text-book of medicine ever written. This text-book he dedicated to his three teachers, already referred to, Rev. W. A. Johnson, of his high school days, Dr. David Bovell of his college and early medical course and Professor Howard, dean of McGill University where he completed his medical course.

To one of his friends, Dr. Osler in a half jocular way once gave hints of a black leather bound, padlocked note book, in which he was writing the inner history of the Johns Hopkins Hospital and which was not to be published until after his death. It is to be hoped that his literary executors or Dr. Harvey Cushing who is writing a history of his life at Mrs. Osler's request, will let this note book see the light of day in the near future.

In 1905, Osler accepted the position of Regius Professor of Medicine at Oxford University in England. Here again he brought his practical methods into play and reorganized the departments of Pathology, Physiology and Clinical Medicine. He did not do much teaching himself, but held clinics about twice a week. By virtue of his position he was given rooms at Christ's Church and also had an oldworld country seat at Ewelme, near Oxford.

If one should have the impression that his life at Oxford was one of comparative ease and semi retirement that idea will be at once dispelled by reading an estimate put upon his work by his colleagues in England. He put new life into their methods and transferred his own enthusiasm to students and teachers alike in their scientific investigation and clinical experience. Every writer makes a notable comment on the wonderful humanity of the man, his sympathy and unceasing cordiality. Says one English writer, "He was never known to pass a colleague or student without stopping for a word of greeting and inquiry.

Although not considered a fluent speaker, he was a brilliant writer and is the author of many epigrams. We are familiar with his saying, "A man is as old as his arteries." On one occasion, in speaking of babies' diseases he said, "You need castor oil for acute cases, Grey powder for chronic and paregoric for the mother." Again he says, "There are three well-stocked rooms which it should be the aim of every doctor to have in his house, library, laboratory, nursery, books, balances, bairns." "He may not achieve all these, but I would urge you to start at any rate with the first two."

So far as we know, Osler made no serious attempt to achieve the third for himself until he was forty-three years of age. Three years after coming to Hopkins he married Mrs. Samuel Gross of Philadelphia—nee Miss Revere. To them was born one son. Young Revere Osler was said to be a promising youth, but he lost his life in the great war.

It is needless to say that Osler was active in war work.

In September, 1919, he had occasion to go to Edinburgh and on his return journey was interrupted at New Castle by a railway strike. He secured a car and motored to Oxford, being two days on the road. It was cold and cheerless weather and there resulted an irregular form of broncho-pneumonia. There was delayed resolution, empyema and later multiple abscesses at the base of the lung. Aspiration was done several times and a rib was resected and more pus removed a few days before the end. On Sunday evening, the 29th of December, the rupture of one abscess was followed by hemorrhage into the pleural cavity and death quickly followed. And as another has said "He passed away in the fading light of the afternoon the last Sunday of the year 'gone west' as he would have wished, for he often talked of the land of his birth and adoption." On the 12th of July preceding this, his friends had given him a birthday dinner—his three score and ten and measured by Osler's standard of arterial degeneration, his friends estimated that he would live 14 or 15 more years. Even after he was stricken with pneumonia, his attending physicians expected a recovery. Osler, himself, told them it was the beginning of the end. Only the old janitor agreed with his unfavorable prognosis.

Here was the way he put it, "No, sir, I don't think Sir William will get better: You know how Sir William, mostly on his way down to the hospital of a morning, would drop in to see you and the rest. Well, in the old days, coming in, and likewise going out, he had always a word for me. You know his style, sir, like giving a man a cheery dig in the ribs. But, now these last months I have noticed him greeting you quite merry like; but in between while his face has been grave as though he had something heavy on his mind, and he has walked in and out without once noticing me. It is Mr. Revere, sir, and Sir William won't get better."

The old janitor had made a better prognosis than the physicians, for he had discovered what was hidden from them.

His will bequeathed his library to McGill University, and also requested that his ashes accompany the library. This request has been complied with.

Thus passed away one whom Col. F. E. Freemantle, in a letter to the London Times, January 2, 1920, characterized as the "greatest physician of history." Those who knew him best, described him as one who possessed the genius of friendship to a greater degree than anyone of our generation." It was his wonderful interest in all of us that was the outstanding feature." Someone has said that "it might be said of him above all others the angel might write him as one who loved his fellow man." It is freely admitted that there have been greater medical men, Harvey, Lister and others, yet when we pass in review the great physicians, those who by their writings, their practice, their teaching and their lives, have exercised the greatest influence over the greatest number of their fellows, putting together all those powers which make the complete physician, Osler must be awarded the first place. Think of the influence of his text book, not merely among English speaking people, but the world over, even, to China and Japan. There is no one who has done so much to advance the practice of scientific medicine, no one whose personal intimacy with his fellows in the profession has covered so wide an area—Canada, the United States, Great Britain and the leaders of medicine the world over.

Just before he left for Europe in May, 1905, a dinner was given in his honor at Waldorf Hotel in New York by six hundred medical men in Canada and the United States. Extracts from two speeches made on that occasion tell us something of the source of his wonderful power.

Dr. J. C. Wilson said, "Not only by precept but by example has he been an uplifting influence in our professional life. The source of that influence is to be sought not merely in his accomplishments as a physician, not in learning, not in his wisdom, not even in his well-balanced bouyant temperament, but in that basic principle which we all recognize but can never define, which for want of a descriptive name we call character."

Abraham Jacobi said, "Your character and learning, your sound judgment and warm heart, your generosity and persistency, have gained thousands of friends. There is nobody here or outside that coming near you has not been attracted, improved and inspired by you."

These remarks may well be closed by a quotation from one of Osler's own essays, "In my daily life I have had three personal ideals. My first is to do the day's work well and not bother about tomorrow. My second aim has been to act the golden rule as far as in me lay toward my professional brethren and towards the patients intrusted to my care. My third has been to try to cultivate such a spirit of equanimity as would enable me to bear success with humility, the affection of my friends without pride, and to be ready when the day of sorrow and grief comes to meet it with courage befitting a man."

"I have loved no darkness
Sophisticated no truth,
Nursed no delusions,
Allowed no fears."

Each of us carries within us a more accurate recording-machine than any made by human hands. Only, we don't always exhibit the record.

The happiness that comes from getting isn't one-two-three with that which comes from giving. If you haven't found it so, overhaul yourself.

EXTROPHY OF THE BLADDER.

A review of the literature and report of a case.

Lester E. Hockette, M. D.,

W. M. Scruggs, M. D.,

Thomas Art Smith, M. D.,

Charlotte, N. C.

Extrophy of the bladder is listed by most authors as a sub-head of anomalies of the bladder and urinary tract. This condition is very rare and is little heard of in one's professional lifetime, hence the more reason for reporting its occurrence and the clinical course and treatment in so far as possible of each such case.

Ectopia Vesicae (extrophy of the bladder) or absence of the anterior wall of the bladder is said by Pousson to be by far the most common congenital defect of this organ and is more common in male children. It is accompanied in most cases by epispadias (absence of the roof of the urethra) and defective development of the structure of the anterior abdominal wall in front of the bladder. The symphysis pubes is generally defective and may be even absent, presenting only a widened notch. The posterior mucosa and wall of the bladder may protrude into the hypogastric or pubic region. The ureteral orifice can generally be found upon careful examination. The average subject with this deformity shows poor development and many show other defects. In some cases the scrotum is cleft so that the external genitals of the male child may somewhat resemble those of the female. The testes are sometimes undeveloped and may or may not occupy their usual position in the scrotum. Inguinal hernias are common. The protruding vesical mucous membrane is thickened and sometimes ulcerated. It is usually bathed in mucous. The constant contact of the ammoniacal urine with the surrounding skin causes troublesome exzematous conditions. Eventually the bladder inflammation travels up the ureter causing pyelonephritis and the patient rarely reaches maturity. Sajous claims only 30 per cent reach the 21st year of life.

Etiology: The urinary bladder and part of the urethra are derived from the intra-embryonic portion of the allantois. The abdominal walls gradually closing on the allantois and true chorion

leave only the umbilical aperture. The extra abdominal allantois and chorion fusing form the fetal cord while the intraembryonic portion or tube extending from the intestine to the umbilicus, dilates in its middle at about second or third month of gestation, to form an elongated sac which develops later into the urinary bladder and urethra. The portion from the spindle-shaped sac to the umbilicus gradually atrophies to form eventually the urachus or superior ligament of the bladder. When the urachus and umbilicus remain more or less patent the result is a urinary fistula. The portion of the original allantois between the intestine and the newly dilated bladder portion becomes the sinus urogenitalis. This sinus urogenitalis receives the termination of the Mullerian and Wolffian ducts, i. e., mesonephric and genital ducts. All this takes place between the second and third months. Failure of the urogenital folds to close properly results in some form of anomaly of the unrogenital organs commonly known as a deformity.

Failure of the sinus urogenitalis to close is not always, if ever, caused by dissipation of the parents or foreparents. This will be shown in our case report which will follow.

History of the Case: Late in 1919 the mother came under observation for treatment and care preparatory to delivery. Routine urinalysis (chemical and microscopical) blood-pressure and history were taken and recorded. She revealed nothing abnormal whatever. She was reassured that in all probability she would have a normal delivery and asked to remain under observation from time to time at stated intervals. This she did and was a very satisfactory patient. There was only one symptom which can be recalled of any note whatever. She was a primipara and was very apprehensive and anxious lest her baby would be "marked" at birth. (This, we believed due to conversations with the superstitious.)

The delivery was normal in every respect, except a little more rapid than the normal primipara. The first stage lasted only eight and one-half hours and the second two hours. The mother withstood the labor in fine condition and made a very uneventful recovery. She was able to feed the baby from the breast and continued to do so.

At birth this baby was apparently well-developed in so far as size, weight, bone and subcutaneous tissues were concerned. He was of normal size (weighing eight and one-half pounds). He was abnormally active. He cried lustily immediately after birth and kicked and turned about more quickly than the normal child is wont to do.

The first impression of the physician who delivered this case was that the child had accidentally bursted the lower part of the juncture of the two halves of the anterior abdominal wall. The bladder mucosa was protruding and everted. There was blood and mucus covering the surface and the mucosa had much the appearance of the small intestines protruding. To prevent shock to the mother, the baby was removed to an adjoining room and examined. This examination revealed an abnormally low implantation of the umbilical cord (just at the upper margin of the bladder mucosa) about an inch below the normal location of the umbilicus.

The cord was unusually large and boggy. It had little tenacity and did not hold the tie well. The bladder mucosa protruded in an angry mass. The epispadias was complete. The penis was short, broad, grooved and purple in color. The scrotum and testicles were normal in size, position and appearance. The resistance in the abdominal wall around the bladder seemed well developed at the time. But for the deformity which was visible the child seemed quite normal. A nurse was retained to care for this child and the area dressed as often as the gauze became saturated with the seeping urine.

No especial trouble was noted until in March, 1920, when the mother called on the physician because the baby cried and screamed continuously. Examination revealed a strangulated hernia on the right side. The child was then about four weeks old. At this time the fact was noted that there was an abnormal lack of spincter control of the bowels. Defecation occurred at frequent intervals and was attended with pain after the hernia developed. Dr. Scruggs was called into consultation and the case with its dangers gone into with the parents. At their request we decided to operate. A modified Halstead operation was performed and the sac obliterated. The baby stood the anesthetic and oper-

ation beautifully. He remained in the hospital only a few days and returned home. At the time of operation, it was noted there was a faulty development of the inguinal rings, fascias and muscles. The peritoneum was thickened and heavy. After remaining at home for about five or six weeks a similar hernia of the left side developed and became incarcerated. It did not strangulate. Repeated attacks of crying and attempts to reduce the hernia led to a decision for another operation. The hernia operation was similar to that on the right side.



*Hernia on the right side.
(Before Operation)*

After completing the hernia operation the incision was allowed to heal and a plastic closure of the bladder cavity was attempted. The ureters were found to open just beneath the skin at the upper margin of the denuded area and very near together. This further necessitated the plastic closure method. The protruding mucosa was removed and the fascia and skin closed down to within a quarter of an inch of the penile or urethral groove. The child made an uneventful recovery from these operations and developed a partial bladder function. Much urine drains with incontinence and he has no sphincter control, yet when angry or straining he will

force urine in quantity through the constricted opening.

There has been no return of any hernia symptoms and now at the age of nine months has developed a normal sphincter control of the bowels. The child is strong and healthy. Crawls and pulls up to stand by objects just as the normal child. He has developed a brilliant mind for one of his age and seems to the uninformed a fine baby.

There are different operations designed to overcome this deformity. Woods operation, or the reverted skin flap operation from the abdominal wall and scrotum and the Maydl's operation, or transplanting the ureters to the sigmoid or rectum. These, however, were not practical in this case because the patient was too young to withstand the prolonged anesthetic necessary to a long and tedious technique.

In the care of this patient but little medicines, lotions, powders, etc., have been used. Boric acid powder and saturated solution of boric acid have been the principle resorts.



(After Operations)

(Before summarizing this case a note of the family history is not out of place. The mother, as I have stated, is a young lady, primipara, of average weight and height. She is in perfect health and

comes of a line of the best people of the country. She never has had any sign of specific disease and there is no history of it or its complications in the family. Neither she, her mother nor her sisters have a history of repeated miscarriages. The father is a man of high moral character, is from an equally clean and prominent family and has no habits, neither smoking, drinking nor chewing. In order to be sure of these points Wasserman reactions were made on the parents and their blood counts and urinalyses taken. They were all normal or negative. The only sickness the parents have ever had except the infectious diseases of childhood were, typhoid fever in the mother in 1918 and influenza in the father in 1919 (after the mother became pregnant.)

Summary: Extrophy of the bladder is, relatively, very rare. It occurs more frequently in the male child.

There is nearly always weakening or under-development of the anterior abdominal wall. Hernia is a frequent complication. Involvement of the bowel and anus may be present.

The child, though often under-nourished and under-developed, may be quite normal but for his deformities.

Very young children may be operated with care and caution. Operations for these deformities must be decided upon from the practical as well as the ideal or scientific point of view. Far too often these deformed children seem to be possessed of abnormally active minds which in time will only make them more keenly appreciate the social position they must occupy.

The cause of the failure of the sinus urogenitalis to properly fold in and close thereby completing the normal formations cannot in all cases be attributed to dissipation or hereditary lues.

Every man should aim to be a master egotist. He must believe, with all the intensity of his being, that he can render at least one service to the world better than any other man. Then he must make good.

We must be ourselves, loving, hating, working, loafing, cowardly, courageous human folks. Why not accept all things and all facts and say, "Thy will be done?"

Acute Cardiac Upsets, Occurring During or Following Surgical Operations.—Samuel A. Levine bases this paper on observations in nine surgical cases in which there had been some sort of circulatory upset or collapse during or following operations. Surgical shock is excluded from the study. The conditions were diagnosed by the surgeons as acute dilatation of the heart in some cases, and might very well have been similarly diagnosed in others had not the real nature of the disorder been discovered. In this study particular attention was paid to the mechanism of the heart beat, and in each instance this was found to be abnormal. Of the nine patients three had paroxysms of auricular tachycardia, four suddenly went into auricular fibrillation, and the other two had paroxysmal auricular flutter. Every patient had a high grade of auricular disturbance, and in all but two the condition was transient in nature, the normal rhythm subsequently being resumed. Graphic proof of the abnormal mechanism, obtained by taking electrocardiograms of six patients, and the clinical course of the other three, left no doubt as to the real nature of the disturbance. It is urged that well-defined terms which actually describe the abnormal mechanism be employed when possible, rather than the vague name "acute dilation of the heart." Direct vagan pressure or ocular pressure proved successful in arresting all three of the cases of paroxysmal auricular tachycardia. Proper digitalis therapy controlled the course of the cases of paroxysmal aricular flutter and paroxysmal auricular fibrillation.—(J. A. M. A.)

I feel it my mission to speak flame-filled words of inspiration and hope and courage and neighborliness to those who are heavy laden.

Whenever we think of our own importance it is good to read some book on astronomy. That shows us how small, how insignificant we are.

Waste no pity on him who has lost his ideal. Save it for him who has lost the desire for an ideal.

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of the Estate of the late Dr. Register

CHARLOTTE, N. C.

"Read not to contradict and confute, nor to believe and take for granted, nor to find talk and discourse, but to weigh and consider."—Francis Bacon.

THE PHYSICIAN AND CIVILIZATION.

No human being in any sphere of life wields so powerful an influence in moulding public thought and action as the family doctor—as the man who whether surgeon or internist enters the very Holy of Holies of human lives. The pastor may preach and hold the serious thought of his hearers but the doctors' influence is potent in that subtle way which cannot be shaken off.

No other man is so much a part of the family; therefore, the influence of the medical profession from the standpoint of thinker, teacher and adviser in his community, is of inestimable value in moulding citizenship and civilization.

In the present dark and trying hour in the nation's history no outside menace is anything like as formidable as the dishonest citizen within—**dishonest citizenship.**

The intoxication of high prices and plenty brought about a stampede when the individual forgot altruism and in his wild frenzy for selfish gain he bolted through the herd entirely oblivious of the weaker ones he was trampling under foot.

The higher the type of citizenship the greater should this naturally selfish instinct be under control. The citizen who has not learned that there must be a limit to his rights as possessions has not learned the very foundation upon which law and order must exist. That law which does not equally control the extremes of social conditions is not constructive but insinuating and must inevitably lead to revolution and destruction.

But—can men of middle age be reformed? It's doubtful. How truthful is the saying that the education of the child begins generations before its birth. It is the peculiar and unique privilege of the medical profession to not only wield its powerful influence for the betterment of the present generation but to a much greater degree to influence the children and—yes—the unborn generations.

Our professional service must extend beyond our pills. We are citizens and citizens with supreme responsibilities to the community and nation—to citizenship and civilization.

We must treat the minds of the beginners in the world.

Can any child born in degeneracy, illiteracy and squalor, surrounded by filth and moral uncleanness be expected to take his place in the world alongside the child blessed with means and education? Yet this same unfortunate child—unfortunate through no fault of his own, comes struggling on and is given an equal right in franchise to a voice in our government and our nation's future destiny.

Whether in the slums of our cities or the isolation of some rural districts, the physician may be and probably is almost the only man of broad vision that ever enters this unfortunately born child's home. This mentally and bodily starved child grasps with eagerness the impressions brought to him by this idolized doctor man from, to him, another world. Consciously or subconsciously the doctor is this child's ideal and his life, actions and thoughts are emulated. There is only one way to make a man a worthy citizen of the world and that is to first make him a frank, honest child.

He must be taught that others have a right to live and that the man is a contemptible coward who uses his peculiar position, skill or means, to crush the right and privileged life from any other man.

Law can never be stronger than the citizenship which enforces it. Law is impotent because law begins too late. The need is prophylaxis. The doctor is the one man because of his unique position in society to apply the prophylaxis. He is ever the bridge between the two extremes. Within the same hour he enters the luxurious quarters of the

wealthy, prescribing for the over-gorged liver of the overfed family darling and the destitute quarters of the poor where a small but future voter is starving for the most meager nourishment.

No physician but that has his circle of followers and influence. Thus the medical profession, operating from these thousands of centers, reaching every habitable district, can be a most dominating means of educating the youth of our country to higher types of civilization.

STAGNATION AND DEATH.

One of the most lamentable of all tragedies of the profession is for the physician to become discouraged in his work, cease to be interested in his surroundings and begin to stagnate. Yet just as water falls downward, so this is the tendency of the man whose environment shuts him off from the more inspiring and nobler things of life. As the chameleon changes color so the brightest man will unconsciously take on to some degree the color of his surroundings. He comes out of his college and hospital with a spirit to move the world, but finds his field of labor in some needy but possibly isolated locality—then, all too soon, he is the victim of his environment and with drooping shoulders and a disconsolate expression he doggedly says he hasn't time to go to his medical society meeting or mingle with his confreres whose influence would be an uplift—and following this as night follows day you will soon be sure, as you enter his office, to see the medical journals which have continued to come to him, lie in careless heaps, covered with dust and wrappers unopened.

As doctors we must shake ourselves from the enthralling lethargy and awoken to the glorious possibilities that are ours.

Certainly no publication gives so much for so little as the modern medical journal. It is a marvel that the editors of such publications do not lose some interest on account of their small compensation and listless response from their readers, and they would if not stimulated by that strong desire to teach for the good of mankind.

It is absolutely impossible for any man to ever become completely educated in medicine, but if it were possible for him to be so on Monday he would be behind the times on Tuesday if he ceased to mingle with his fellows and read. The most isolated physician has it in his power to be the strongest citizen and most potent factor for his community good.

The physician must get and retain the idea that his corner of the universe needs him as teacher as well as healer and that he must have a hand in the bringing up of the children as representative, intelligent and law-abiding citizens.

As physicians we must be so many thousand working centers, acting as physicians, teachers and ministers of justice to those who come under our care.

CLINICAL CONGRESS OF THE AMERICAN COLLEGE OF SURGEONS IN MONTREAL, OCT. 11-15.

This meeting certainly ranks as one of the big gatherings of big medical men of all time. The 2,000 doctors present were assembled from all quarters of the globe and each was there for the definite purpose of getting for himself and giving of himself that which will benefit the profession of surgery for the good of mankind. Every hour of the five days' program was filled with clinics, hospital inspection, general meetings for the presentation and discussion of papers and business sessions.

Six hundred and ninety-one candidates were admitted to full fellowship at the convocation on Friday night held in St. James Methodist Church.

The convention was formerly opened with the presidential meeting on Monday evening. The address of welcome was given by General Sir Arthur Currie, C. G. M. G., K. C. B., LL. D., followed by the address of the retiring president, William J. Mayo, and the John B. Murphy oration on surgery by Sir Berkeley Moynihan of Leeds, England.

Tuesday, Wednesday, Thursday and Friday mornings were given over to clinical demonstrations in the various

hospitals of Montreal. These clinics continued also through the afternoon hours; however, there were also afternoon meetings in the ball room at the Windsor Hotel.

The **Tuesday evening** meeting was given up to a Symposium of Intestinal Obstruction, with Doctors Finney, Stone, Guerry, Matas, Summers and Peck on the program and also a Symposium on Blood Transfusion, with Percy, Farrar and Robertson taking part.

The **Wednesday afternoon** clinical demonstration:

Symposium: Differential Diagnosis of Lesions of the Right Side of Abdomen.

George W. Crile, Cleveland.
Sir Berkeley Moynihan, Leeds, Eng.
John B. Deaver, Philadelphia.
A. Primrose, Toronto.
E. W. Archibald, Montreal.
Allen B. Kanavel, Chicago.
A. E. Garrow, Montreal.
B. P. Watson, Toronto.
J. Bentley Squier, New York.
R. C. Coffey, Portland, Oregon.

On **Wednesday evening** Clarence L. Starr, M. D., Toronto, read a paper on "Reconstruction Surgery and Its Application to Civilian Practice."

A. Carless, C. B. E., F. R. C. S., London, presented a paper on "Treatment of Flail Limbs."

Then followed a symposium on "Cancer of Uterus."

William P. Graves, Boston.
William S. Stone, New York.
Robert B. Greenough, Boston.
Howard Canning Taylor, New York.
John G. Clark, Philadelphia.

Thursday afternoon, special clinical demonstrations:

Fulton Risdon, M. D., Toronto—"Mandibular Bone-grafts and Facial Reconstruction Surgery."

John H. Cunningham, M. D., Boston—"Metastatic Gonorrhoeal Arthritis."

F. H. Mackay, M. D. and F. J. Tees, M. D., Montreal—"Diagnosis and Treatment of Peripheral Nerve Injuries."

C. B. Keenan, M. D., Montreal—"Late Results of Foreign Bodies in the Lung."

John A. Gunn, M. D., Winnipeg—"Treatment of Fractures of the Femur."

Thursday evening meeting:

Robert C. Coffey, M. D., Portland, Oregon—"Transplantation of the Ureter Into the Large Intestine in the Absence of a Functioning Urinary Bladder."

Symposium: The Thyroid and Its Diseases:

E. C. Kendall, M. D., Rochester—"The Chemical Influences of the Active Constituents of the Ductless Glands."

H. S. Plummer, M. D., Rochester—"The Significance of the Metabolic Rate as Influenced by Thyroid Pathology."

George W. Crile, Cleveland—"The Protection of the Patient in Surgery of the Thyroid."

Charles H. Mayo, Rochester—"The Thyroid and Its Diseases."

Friday afternoon:

Alfred T. Bazin, M. D., Montreal—"Acute Empyema."

W. E. Gallie, M. D., Toronto—"Demonstration of the Pathological Changes in Bone Regeneration."

Discussion by F. H. Albee, M. D., New York.

F. E. McKenty, M. D., Montreal—"Blastomycosis."

The Board of Regents Banquet, which the writer was privilege to attend as an invited guest, was given Friday evening in the Blue Room of the Windsor Hotel. There were 24 at the table and nearly all were men with a world-wide reputation in surgery. A picture was taken which we hope to reproduce in this journal in an early issue.

At the Eighth Convocation Friday night, sixteen **North Carolina** surgeons were admitted to full fellowship:

Edmund S. Boice, Rocky Mount.
Walter F. Cole, Greensboro.
Thomas W. Davis, Winston-Salem.
Benjamin S. Herring, Wilson.
Paul R. Macfayden, Concord.
J. P. Monroe, Sanford.
J. Gerald Murphy, Wilmington.
Albert D. Parrott, Kinston.
Robert W. Petrie, Charlotte.
Arthur T. Pritchard, Asheville.
Jacob H. Shuford, Hickory.
David A. Stanton, High Point.
J. W. Tankersley, Greensboro.
Neill A. Thompson, Lumberton.
Byrd Charles Willis, Rocky Mount.
Charles A. Woodward, Wilson.

From South Carolina:

Charles P. Aimar, Charleston.

Hugh R. Black, Spartanburg.

Edward H. Sparkman, Charleston.

From Virginia:

Joseph Dorsey Collins, Portsmouth.

J. Kennedy Corss, Newport News.

Charles Wilson Doughtie, Norfolk.

John Randolph Garrett, Roanoke.

Stanley H. Graves, Norfolk.

Edward T. Hargrave, Norfolk.

Frank S. Johns, Richmond.

Everett A. Land, Norfolk.

Burnsley Lankford, Norfolk.

Hunter H. McGuire, Winchester.

William F. Mercer, Richmond.

Harry B. Stone, Roanoke.

Edward C. S. Taliaferro, Norfolk.

The Journal wishes to congratulate these men for this honor that has been accorded them for whatever the general impression may have been the Board of Regents and the central office must be convinced beyond peradventure that a man is thoroughly deserving in surgical judgment, technique and painstaking thoroughness before he is admitted to fellowship. None may be admitted except those whom the best surgical minds of the day are willing to sponsor. Also on the other hand every surgeon who can measure up four square and true to the core is earnestly urged to become a fellow and will be received with wide open arms of welcome.

THE AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY.

We welcome to our desk the first issue of this Journal, which is published by the C. V. Mosby Co., of St. Louis, and edited by a large staff of the best men in their lines in the whole country under the direction of Geo. W. Kosmak and Hugo Ehrenfest.

This Journal takes the place of The American Journal of Obstetrics and Diseases of Children which discontinued publication last February.

The initial number comes chock full of very able and carefully prepared articles and makes the following announcement:

"The editors and publishers have the honor to present the American Journal of Obstetrics and Gynecology to the medical profession for its approval.

The importance of obstetrics and gynecology as an integral part of medical art and science should be measured not only by its interest to those directly engaged in it as a specialty but likewise to those who practice medicine in a more general sense. A topic that necessarily commands the attention of so many physicians must be adequately represented in journal literature and demands a medium of publication primarily devoted to its advancement and welfare. The present venture has been developed in response to this need.

The new American Journal of Obstetrics and Gynecology will be conducted by the profession, for the profession, and in order that the latter may be definitely represented in its management, the general conduct of the enterprise is vested in an advisory board, the membership of which serves as a guarantee that the interests of the profession will be adequately protected and assured.

The policy of the American Journal of Obstetrics and Gynecology will be liberal in the sense of service to the specialist in this field, as well as the general practitioner. The clinician, the pathologist, the research worker, and the sociologist are all welcome to express their thoughts in its pages, which we trust will serve as an effective medium of exchange for the many whose united efforts contribute to make obstetrics and gynecology one of the essential branches of medicine.

"In addition to original communications and records of special society transactions, a feature in the new journal will be made of the department devoted to current medical literature. This important department will be conducted by the Associate Editor, Dr. Hugo Ehrenfest, who will present recent progress and research in this field in the form of carefully prepared reviews and criticisms. We believe that this arrangement will be of great value to our readers.

"The editors and publishers respectfully submit the American Journal of Obstetrics and Gynecology to the American medical profession, fully realizing the trust imposed upon them and hoping for an endorsement of the attempt to serve its interests."

Employers now want to know a young man's school record. They like leaders.

PEDIATRICS.

Yates Faison, M. D., Department Editor.

Pediatrics, for so long booked in the medical curriculum as a minor study, has now taken its place as one of the major courses and a very important one, too. Why this great branch of medicine was given a secondary place in our medical education for so long is hard to understand—the young medical graduate was turned out into his field of endeavor with a meager and pitiful knowledge of the young infant or child in health or disease. Even the simplest feeding case was a mystery to him and he too often turned to the kindly-meant advice of the grandmother or the printed formula on the can of some proprietary food. But today, wonderful departments of Pediatrics have been formed and built up in all of our good medical schools, which are not only giving a much more comprehensive and detailed teaching of the subject, but are doing much in research work in regard to the etiology, pathology, diagnosis, and treatment of conditions and diseases peculiar to infancy and childhood.

The importance of pediatrics as a special study has gradually come to be more and more generally recognized. This is partly due to the same causes which have led to the great increase in specialization in all branches of medicine, but more particularly because of the peculiarities in the manifestations of disease in early life. Difficulties in the diagnosis and treatment of disease in infancy and childhood are encountered which are not met with in adults. The young infant cannot adequately describe his subjective symptoms, but the physician must depend upon his power of observation and the knowledge of their ways that he has gained by intimate and long association with them.

Not only are the standards, by which deviations from the normal are recognized, different from those of adults, but there is a different standard for each age. Manifestations which are normal at one age are abnormal at another. The arrest or retardation of the process of development may in itself constitute a disease picture. Developmental conditions form an important division in the etiology of disease in children but

play no part after adult life is reached. We do have the same diseases in children and in adults, but their manifestations are greatly modified by the incompleteness of the child's development. Children are not only liable to most of the diseases seen in adults, but also have a group of diseases peculiar to themselves. They also have their own peculiarities of resistance, or lack of resistance, to these conditions and their treatment must be modified from time to time to correspond to their age and stage of development.

In this column I shall endeavor to present subjects that are of common and general interest to the busy "general practitioner," and in a practical way so that he can make use of it. Also from time to time, abstracts of the current literature will be inserted, and some of the newer and approved methods of diagnosis and treatment.

Urology

A. J. Crowell, M. D., Department Editor

Radium in Urology and Dermatology.

In offering this special Radium Number to our subscribers we indicate our estimation of the therapeutic value in which we hold radium.

Unhappily, surgery does not avail in any large degree in the treatment of bladder malignancies, two principal reasons being found for this unsatisfactory status of surgery. In the vast majority of instances bladder growths are not detected in their incipency, tumors being well developed and infiltrated—even metastasized—before coming to the attention of the urologist. Another disadvantage attaching to these growths is their frequency of location in the base of the bladder which, of course, makes surgical removal all the more difficult. With most urologists radical surgical procedures have become highly debatable, and they are beginning to rely more than ever before upon fulguration (for fulguration has its uses in certain malignancies), cauterization, the X-ray and radium.

One objection to the employment of radium is its high cost. New York has made a step in the right direction by purchasing \$225,000 worth of radium for free use. Other states and smaller

political units will undoubtedly soon do likewise, so that before long we may have more easily accessible supplies of this remedial agent.

A feature in connection with the use of radium we should like to emphasize is the advisability of men securing not only a supply of radium but a thorough training in its uses as well. The man who knows thoroughly his remedial agents, together with their limitations and untoward influences, will be capable of so much more effective work with them that he will be amply repaid for devoting a given time to a comprehensive preparation in their uses. All too often powerful agencies for good are to be found in the hands of men whose chief professional equipment is a spectacular array of appliances and unlimited assurance which make a marked psychological impression upon an easily influenced clientele. This type quickly brings a really meritorious appliance or remedial agent into disrepute because of unintelligent application. This is an unfortunate phase of radium therapy that must be contended with, and it is up to the better qualified men to do it.

The use of radium in urological and skin conditions has large possibilities, especially in inoperable malignant conditions and as a post-operative prophylactic measure, but it must be applied intelligently, with the fullest knowledge of its potential powers for good as well as harm, and this method of application becomes possible only through a thorough and idealistic study of this wonderful and mysterious element.

"It is not surprising that when radium first made its appearance over-optimistic claims for its use and hope of its utility should have occurred. But that time is now past. Radium has been made available in smaller and larger amounts to all of the important centers of cancer research in this country, with the result that not alone has new knowledge of this agent been greatly advanced but the technique of its use as well as its limitations have been more definitely defined. The last six years have marked steady progress in its application, and means of more scientifically and more efficaciously employing it have been developed.—The Urologic and Cutaneous Review, Oct. 1290.

Gynecology and Obstetrics

Robt. E. Seibels, M. D., Department Editor

Progress in Gynecology—The editor of this department has recently taken the opportunity to visit some of the hospitals in New York and was especially interested in the work being done for gynecologic patients. In the majority of the hospitals, gynecology was not a separate service but was under the department of general surgery: it was our observation that in those institutions where it was a separate specialty better work was done and the future of the patient was more often given its proper consideration.

At the Woman's Hospital, a "Follow-Up Clinic" is in operation and it impressed us as an exceedingly sound idea. Each surgeon has his allotted time at this clinic and he is required to be present for his hours. His cases are then brought to him for examination together with the cards for each one: this card bears a typewritten abstract of the hospital record during her stay there. He notes the condition of the patient at this examination, her symptoms, whether or not she was relieved temporarily or permanently, the anatomical result of the operation and his recommendations. Through a most efficient social service the majority of the former patients are brought back for repeated examinations. Thus the result of his work is forcibly brought to the attention of each surgeon.

The notes on these cards are correlated and tabulated and at the end of a period the statistics are discussed at staff meetings.

Sterility in Women—Several gynecologists have spoken enthusiastically of results obtained by the use of corpus luteum preparations. They are emphatic in insisting that before this be given, a most careful examination be made to rule out disease and, just as it takes two to bring about conception, we must examine two patients in each complaint of sterility. If we find the male is potent and the woman has no disease or malformation, corpus luteum may be tried. One observer said that he had had excellent results in three cases he had tried where there had been no con-

ception in more than two years in each case. He recommended a douche of soda bicarbonate—a drachm to the quart of warm water—just before intercourse and gave the corpus luteum by hyperdermic three times a week.

Menstrual Disturbances in Girls—If a physician is consulted by a young girl for menstrual disturbances he is often confronted by an embarrassing situation. The examination of the pelvic organs either by vagina or by rectum is a serious trial to a girl and, of course, would be undertaken only if he believed serious pathology existed. And not only because of modesty and consideration for the patient's feelings, but because he knows if any tender point is encountered, a nervous girl may become convinced that her ovary is "out of position" and add yet another source of worry. He may, therefore, be tempted to prescribe some uterine sedative, advise her to dance less or exercise more, as the case may be, and comfort her mother by the assurance that she will "outgrow it."

Meredith (Surg., Gynec., Obst., XXXI, 382) reports the result of her treatment in more than 2,000 cases. A careful history was taken and the majority of these cases were classed as suitable for mental and physical hygienic treatment before taking any further steps, and the vast number were relieved of all symptoms.

The mental treatment consisted in educating the girl and her mother to regard menstruation as a normal event and not to call it a "sickness," and to take the attitude that it did not mean taking to bed, giving up any activity or discontinuing baths.

Secondly, exercise and especially the correction of posture and the development of the abdominal muscles.

Teaching the girls to stand correctly was almost the keynote of this treatment; for in order to do this she must develop all her muscles which meant proper exercise, fresh air and good food and resulted in the correction of constipation without drugs, an associated evil in most of these cases.

Meredith says, "In asking many hundreds of girls whether they knew they had muscles in the abdominal wall, I have been surprised to find that most of them were unaware of the fact that anything but epidermis and fat covered

the abdomen." The author details some splendid exercises and justly claims that these measures have the advantage over other forms of treatment in that they improve the general health and therefore will improve the functional disorder to some extent, at least. And indeed, if the disorder should persist after a fair trial of this method, one can be sure that it is a real condition and in no way a "nervous" manifestation.

Orthopædics

Alonzo Myers, Department Editor

The Mechanical Treatment of Compound Fractures of the Upper Extremity.

By James E. M. Thomson, A. B., M. D.,
Lincoln.

Nebraska State Medical Journal, 1920.

The paper is limited to the mechanical treatment of compound fractures of the upper extremity with no reference to etiology, anatomical relations, or infectious processes complicating bone injuries except as they bear directly on the treatment of the particular fracture discussed.

According to definite principles of treatment he has the following classification:

1. Fractures of the humerus.
 1. (a) Fractures into the shoulder joint.
 - (b) Fractures of the surgical neck and upper third.
2. (a) Fractures of the middle and lower third.
 - (b) Fractures into the elbow joint.
2. Fractures involving the bones of the forearm.
 - (a) Fractures above the lower fourth of radius and ulna, one or both bones.
 - (b) Fractures of lower end of one or both bones and into the wrist joint.

In discussing the mechanical treatment he takes up the importance of first aid treatment as soon as possible after the injury. By this the proper splinting and position of the part is maintained during transportation and until hospital management can be begun. First aid plays a definite part in the ease of

after management and the character of the final result obtained.

The various positions are described according to the site of the fracture, it also being emphasized that merely fixation and no traction be made in fractures of the shoulder joint, while traction is employed in fractures of shaft of humerus. In case of fracture of the elbow joint flexion with slight or no extension is the position of election.

The cock-up or dorsiflexion position should be maintained in case of fracture of the lower ends of the radius or ulna when there is carpal complication. Hospital management should embody every feature to promote the best results. The various mechanical devices should be largely guided and checked by roentgen examination, in order to shorten the period of disability and at the same time hasten healing and union. The ambulatory type of splint should be used as early as possible. This is judged by the physical condition of the patient and the appearance of the wound.

In caring for these cases only sufficient traction need be employed to maintain position. In fractures of the arm, abduction angle and external rotation need be guided by the position of the upper fragment.

Shoulder joint injuries should not have traction. In fractures of the elbow, flexion is preferable when possible. Forearm fractures must be held in supination. The methods of making traction the position of election, also the splints best adapted for the various types of fracture are very ably discussed.

Treatment of Birth Fractures at Fordham Hospital.

S. W. Boorstein, M. D.

American Journal of Diseases of Children, May, 1920.

The author discusses the various methods of treatment of birth fractures, vertical suspension, vertical suspension plus weight and pulley traction, modified Bradford frame with vertical suspension, oblique suspension combined with traction, and Truesdell's box splint.

He reports six cases, three of which had a fractured femur, two a fractured humerus, and the remaining case a fracture of a femur and a humerus. In

these cases the Thomas knee splint with torsion traction was used. The perineal ring is not applied as tightly as in adults. The brace extends three or four inches beyond the foot. The ring is covered with flannel or chamois which can be changed every two or three days if necessary. To prevent foot drop a tongue depressor is placed on the plantar surface of the foot and held by bandage to the bars of the splint.

A roentgenogram can easily be taken and it is also easy to administer massage. The child lifts up the foot together with the brace, and thus the proper voluntary movements are made and union is hastened.

The patient can be cleaned and dressed easily and carried about whenever necessary. The braces are left on for from three to five weeks. The foot or hand has to be watched for swelling which can be prevented if the bands are loosened up once in a while and the parts massaged. The ring of the brace must not be too wide, as it will press on the axillary vessels in the upper extremity or on the other thigh if the case is one involving the lower extremity. In the latter case a deformity may be produced.

State Medicine

L. B. McBrayer, M. D., Department Editor

State Regulation of Influenza.

The epidemic of influenza of 1918 caught many states and health departments totally unprepared. As there were no adequate regulations aside from the powers of the boards of health for handling this disease, much emergency legislation ensued. It is generally realized that there is a wide divergence of opinions and regulations in the various states and municipalities concerning this disease. In an endeavor to ascertain points for a model control of the subject, the State of Minnesota sent a questionnaire to state health officers in each of the states covering the general points of greatest importance. It was found that 97.5 per cent. of forty states that replied have some method of reporting the disease: in 74.4 per cent. to the local health officer and in 12.8 per cent. to the state health officer. There is

quite a diversity in the rules regarding quarantining and placarding. Isolation or quarantine is maintained in twenty-four states, the time varying from two days after return to normal temperature to fourteen days after return to normal temperature, and in five states until complete recovery from all clinical symptoms. Influenza is placarded in fourteen states, not placarded in nineteen, and controlled by local authorities at their option in five. There is no definite ruling in many states regarding the policy of closing public places in epidemics. The tendency is for the state health officers to shift these responsibilities to the local health authorities. An interesting point brought up in the questionnaire was: "Do you recommend the use of serum (a) as a prophylactic, (b) as treatment?" One state recommended its use for prophylaxis only, and no other state recommended it at all, although some answered that they recommended anti-pneumococcic vaccine as a prophylactic against complications. This analysis is valuable as an indication of the necessity for greater knowledge of the disease, its etiology, mode of transmission, duration, etc., before adequate control can be effected.—*Jour. A. M. A.*, Sept. 25, 1920.

Public Health Service Takes Over Army Hospitals.

Two army hospitals, one in North Carolina and the other in New York harbor, will be taken over by the U. S. Public Health Service during the present week.

The North Carolina Hospital (O'Reilly Hospital), which is at Oteen, eight miles from Asheville, will be continued as a tuberculosis hospital with about 1,000 beds. Dr. W. M. Foster will be in temporary charge.

The location of the hospital is beautiful and the institution is admirably adapted to the treatment of tuberculous disease. The buildings were erected by the army for that particular purpose and are superior to most of those in base camps. Two of the wards will be remodeled; and some additional buildings will be erected for the use of the staff, especially the married staff, for whom no accommodations now exist.

The present patients will probably remain, if the hospital equipment can be

taken over with them. The nurses, except those who wish to take accrued leave, will remain.

The hospital in New York, variously known as the Hoff General Hospital and the U. S. Debarcation Hospital, is at Fox Hills, about ten minutes' walk from the New York City ferry station at Stapleton, Staten Island. It will be continued as a general hospital with a capacity of about 500 beds. Dr. J. O. Cobb, recently in charge of all Public Health Service activities at Chicago, will be in charge. By reason of its proximity to New York City this hospital has available the best consultation facilities in the country.

Public Health Service Leases Altamont Hotel.

The U. S. Public Health Service has leased the Altamont and Avenel hotels, adjoining Fort Thomas, near Newport, Ky., across the river from Cincinnati. The Altamont is to be used as a general hospital for the seventh district of the Public Health Service, which comprises the States of Ohio, Indiana and Kentucky. The Avenel, which is ten minutes' walk from the Altamont, will serve as quarters for the hospital staff.

The Altamont is beautifully located on a bluff overlooking the river. It is in good condition and can be occupied at once for non-operative cases, as certain necessary improvements in the kitchen can be made while the building is in use. The same is true of the operating room that is to be built.

An important feature of the hospital will be its bathing facilities. For some years mineral waters from springs in the vicinity have been utilized, with or without electricity in baths for the hotel. Their therapeutic value has long been recognized.

The hospital will have about 200 beds.

Beginning whole-time county health work in North Carolina in 1916, there are now 24 counties of the State, including 38 per cent of the State's population, enjoying the benefits of the system.

Every act is a boomerang. Read that again.

X-Ray and Laboratory

Robert H. Lafferty, M. D., Dept. Editor.

X-Ray Diagnosis of Appendicitis.

Geo. E. Pfahler, in the American Journal of Roentgenology, says that while in most cases roentgenology is not necessary to make a diagnosis of appendicitis, yet there are a number of borderline cases where the symptoms are puzzling in which a complete roentgenological examination will give very valuable information and often prove absolutely the presence or absence of chronic appendicitis. He gives a lot of instructions as to his technic which may be worth repeating.

The patient is given a preliminary purge, preferably of a bottle of citrate of magnesia, at 9 p. m. on the evening before the contemplated examination, and presents himself at 9 a. m. the following morning without breakfast, at which time a careful study is made of the gall bladder region as well as a look-out for any possible kidney stones. The chest is next viewed fluoroscopically to detect any subnormalities there which might have a bearing on the abdominal symptoms.

The patient is then given a drink of 2 ounces of barium in one pint of buttermilk and the stomach and duodenum are studied. He is viewed again 3, 4 and 6 hours after taking his barium meal, and if the stomach and duodenum are negative, he is seen again 8 hours after his first drink. At this time the material had entered the cecum and ascending colon and sometimes the appendix may be viewed. The patient is again seen 24 hours after his first drink, at which time the cecum and ascending part of the transverse colon are usually well filled and the appendix can often be demonstrated. Later the patient may be finally seen again 48 hours after his first drink, and if necessary at this time a barium enema may be given to recognize any constriction or filling defects.

The following diagnostic points are to be sought:

1. Localized Tenderness. This is the most valuable sign of chronic appendicitis and may be elicited by palpation under the fluoroscopic screen or with the "distinator." If the appendix is found filled with barium, pressure over

the appendix causes pain, and if the pain moves with the movement of the appendix, we have a diagnosis absolutely confirmed. Furthermore, if the appendix is pathologic the tenderness, once found, is persistent throughout the course of the examination. Vague tenderness is most likely to occur when the appendix is retrocecal.

The author says: "If no tenderness is present and if at the same time the cecum is freely movable, I believe that no appendicitis exists. On the other hand, if there is localized tenderness over the cecum with fixation of the cecum and no visualization of the appendix, it very frequently means the obliteration of the appendix by an inflammatory exudate which prevents the appendix from filling with the barium meal.

"Localized tenderness with fixation of the cecum but without filling defect of the cecum is, I believe, a strong evidence of appendicitis."

Oftentimes the roentgenologist will find that the tender spot in McBurney's region supposed to cover the appendix is not over the appendix at all, but with the variation of position of the cecum and appendix, the appendix may be some distance away. This, of course, gives valuable aid in a differential diagnosis.

2. Demonstration of the Appendix. Case, of Battle Creek, has demonstrated the appendix in 30 per cent of his cases, but there seems to be no unanimity of opinion among the roentgenologists as to the significance of the finding of a barium-filled appendix, some men saying that if the appendix is demonstrable it is evidence that it is pathologic. Case takes the middle ground, claiming that the appendix which can be filled with barium, if not actually pathologic, is at least potentially dangerous. Some authors agree with Case when the barium remains in the appendix 48 hours or more after it has passed out of the contiguous colon.

3. Fixation. A chronically inflamed appendix tends to become adherent either at its tip or along its course.

4. Position. Normally the position of the appendix is downward, but it may lie in any position, and it is apparently proved that a nonadherent appendix may change its position during 24 or 48 hours by its vermicular movement. In general, it may be said that if the appendix is found directed upwards, it is more likely to be pathologic.

Hospitals and Sanatoriums

John Q. Myers, M. D., Department Editor

Montreal Meeting of American Hospital Association.

The sessions of the American Hospital Association, in convention at the Windsor Hotel, were commented on as being of a remarkable business like nature. All the meetings were attended by a large representation of delegates. The records of the registration office showed that, in point of numbers, the convention stands pre-eminent amongst those which have recently taken place in Montreal. Up to the close of the books on Wednesday evening 910 persons had registered. Of these 268 were classified as personal members, 235 from the United States and 35 from Canada. The institution delegates—that is, members delegated by some hospital or other affiliated institution—number 136, of whom two were from Canada. The delegates classified as guests numbered 405, 292 of these being from the United States and 113 from Canada. The records showed that 99 new members had enrolled since the convention opened, 85 of whom were from the United States and 14 from Canada.

It was reported that over 400 delegates had visited the Royal Victoria Hospital, on one day, and that this institution, with the Montreal General Hospital, had attracted a very large number of convention visitors, since the convention opened. In fact, Superintendent Haywood, of the Montreal General Hospital, has been kept busy showing the visitors around, during the last few days.

A number of foremost physicians, who are booked to attend the meetings of the American College of Surgeons were in attendance at the sessions. Amongst these were Dr. Franklin H. Martin, Secretary-General of the American College of Surgeons, Chicago, and Dr. John G. Bowman, director of the same institution, with Doctors Bresnahan and Smith, of the educational staff.

Social Service Side.

The procedure of the association revolved principally around the table discussions, in which the social service side

of hospital work was canvassed for opportunities for inspiration and improvement. The association has carried on a special study in this department, on funds provided for the purpose, and Dr. Anna M. Richardson, field secretary, has visited 60 social service departments throughout the country, with a view to evolving some progressive policy in connection therewith. On the strength of her report a committee of social workers in the hospitals, superintendents, medical men, and others, was appointed to represent this branch of hospital work, and it was around this committee, represented by Mr. Michael M. Davis, Jr., its chairman, that the discussions of the day were taken up. Generally speaking this round table discussion had to do with administration, staff and other matters. For example a regular avalanche of questions, prepared beforehand by delegates, anxious to have the best information of the subject, was extended to the consideration of the expert opinion in attendance, and received intelligent consideration. This department of hospital work, it was pointed out, had been built on provision made for it in the Rockefeller Foundation. It was stated that, as a result of information gathered by investigation on the subject, the association intends to frame a standardization of social service work.

Papers were read by Miss Adna G. Henry, director of social service, Indiana University, Indianapolis; on Occupational Therapy and Placing of the Handicapped, by Miss Lilly E. F. Barry, honorary secretary, Catholic Social Service Guild, Montreal; followed by discussion participated in by Rev. John O'Grady of the Catholic University, Washington, D. C.; Miss N. F. Cummings, editor of the Hospital Social Service Quarterly of New York, and Miss Ida M. Cannon, president of the American Association of Hospital Social Service Workers, Massachusetts General Hospital, Boston.

Need for Trained Workers.

That there is a great and increasing demand for thoroughly trained social workers in hospital social service in the United States and Canada but that the amateur or semi-amateur is practically useless in that branch of social work, was clearly brought out in the report

on the survey of hospital social service presented at the convention of Hospital Social Service Workers held in conjunction with the American Hospital Association meetings in Montreal.

There are approximately 2,500 hospital social workers in the United States and the American Hospital Association has recently completed a survey of the work done by them throughout the country. The presentation of the findings of this report was said to be one of the most important items of the programme as it was of interest not only to the social workers and hospital executives, but to the community as a whole. The necessity of standardization of training requirements for workers and of methods of work was emphasized by Mr. Michael M. Davis, chairman of the survey committee who presented the report and above all, said the speaker, a thorough course of training was imperative before effective work could be done in hospital social work. Hospitals which were considering the opening of a social department were advised to do nothing until they could obtain the services of a worker who was thoroughly competent in such work as mistakes in administration of such a department led to confusion and serious results generally.

In accordance with the fact that the necessity for social work in connection with hospitals is now universally recognized, a larger place was given the department on the programme of the American Hospital Association convention than ever before, and about 100 hospital social workers attended the sessions, of whom about three-quarters were from the United States.

Miss N. F. Cummings, managing editor of the Hospital Social Service Quarterly published in New York, explained that the original hospital social service workers of the English-speaking world were the Lady Almoners of England, who did voluntary aid work in connection with the hospitals of England as far back as the 17th century. In the United States social work in direct connection with the hospitals of the large cities was begun about 1890, but was very limited in its operations until about 12 years ago, when it received fresh impetus and increased in volume and effectiveness up to the outbreak of the war, when it received a decided set-

back but is now again assuming large proportions.

At present about 52 per cent of the hospital social workers of the United States are graduate nurses who have taken the social training after finishing a course in nursing while 48 per cent have had only the training in social work. All things being equal, the trained nurses are the more valuable social workers in hospitals.

Something of what is being done in Montreal along kindred lines by the English-speaking Roman Catholics of the city was told by Miss Lilly E. Barry, who addressed the convention on occupational therapy. Miss Barry explained the complete system which had been built up for the care of those physically or mentally handicapped, by a chain having been formed of hospital, convalescent home, the Catholic Social Service Guild and the Loyola School of Sociology, where workers could be trained. It was explained that educational therapy could not be attempted in the regular hospitals as beds were so few that the patients must be removed to convalescent homes as soon as possible, but in all these homes, as in special institutions for the handicapped, the sisters in charge give valuable instructions to the patients and encourage the doing of work as a curative agency. The result is that many men and women who are apparently hopelessly crippled by disabilities of various kinds are enabled to become useful citizens. Here the Catholic Social Service Guild steps in and provides employment for those who have proved themselves capable of doing useful work.

Differential Diagnosis of the Conjunctival Folliculosis and Trachoma.

The differences between folliculosis and trachoma are fully discussed by J. W. Jersey, Greenville, S. C. (Journal A. M. A., Oct. 23, 1920), and he suggests that every state board adopt a rule that the solution of all questions of serious importance in connection with the eyes of school children shall be entrusted only to such men as hold the certificate of the American Board for Ophthalmic Examination.

Don't forget that humility and ability usually go together.

Nurses Corner

Edith M. Redwine, R. N., Dept. Editor

We have heard much recently concerning the shortage of nurses, both student and graduate. Perhaps the following extracts from a paper written by Dr. Christopher G. Parnall, of Ann Arbor, Michigan, will give us much to think about concerning the problem of demand and supply of nursing service in North Carolina:

"From the records and from the experiences of those who are capable of drawing correct conclusions, it can safely be stated that there exists, at the present time, a shortage, the country over, in nursing service. Yet, figures would seem to indicate that there are more pupils in training at the present time than ever before in the history of the profession of nursing. Apparently there never has been an adequate supply of nurses and the demand at the present time surely is greater in comparison with the supply than ever before. The shortage is, after all, then, a relative shortage. It is probably true that during the past year fewer young women entered training schools than in the year preceding, which, of course, may be explained by the withdrawal of the incentive for service, inspired by patriotic motives.

We must bend our energies toward remedying this condition, even though the shortage of nurses be relative, as the demand for skilled nursing is sure to exceed the supply for some time. Doubtless large numbers of new hospitals will be established because of the now generally accepted view that the hospital is the place in which to treat the sick. Such an attitude on the part of people generally toward the hospital will, in a measure, assist in solving the problem of furnishing adequate nursing service, for after all, the keenest demand in the past has been for nursing service in individual homes.

"A number of plans have been proposed, some of them are good; most of them, ignoring the fundamental facts, are, in my opinion, bad. First of all is the unwise proposal to shorten the period of nurses' training, in the hope that more nurses in this way could be prepared for their professional work.

While it is conceded by those familiar with nurses' education that much of the time spent in the school is wasted as far as the actual training of the student is concerned, on the other hand, that the average nurse of today is not properly prepared. Rather than to shorten the time, we should emphasize the importance of utilizing it to the best advantage.

"Some have advocated the lowering of standards of entrance to the training schools. Such a policy would prove a boomerang. It is inconceivable to any thoughtful person that it would result other than disastrously. Young women, ill prepared, might be attracted, to be sure; but certainly those who are adequately educated could only be repelled, and it is important, in this connection, to recognize the fact that ambition to enter the nursing profession comes with increased enlightenment and intelligent desire to be of service to humanity. Larger numbers of recruits can hence be expected from the more highly educated group of inspired young women than from the class actuated largely by less noble considerations. That this contention is correct is, to my mind, borne out by the fact that a greater shortage in the domestic division of the hospital exists than in the nursing department. Young women are not seeking inferior positions in the service of the hospital for they can earn more money outside and under more agreeable surroundings. Student nurses will do maids' work because they are inspired with a higher motive than mere pecuniary gain. The natural result is that most hospitals are taking advantage of the altruistic attitude of the nurses in order to help tide over the period of shortage of domestic help.

While discussing this point, I beg to suggest to you that the shortage is as great in other lines as it is in nursing. Schools have had to be closed on account of the lack of teachers, and farms are standing uncultivated because of the inability of the owners to secure labor, communities are raising bonuses to induce physicians to come to them, and managers of industry, college professors, lawyers and clergymen are dictating their inspirations to mechanical contraptions because of the scarcity and high cost of stenographers. The shortage of nurses then is only an item in a

general dearth of workers in many fields of endeavor and it is not to be expected that any remedy or combination of remedies is going to give immediate relief. That a readjustment must come I have no doubt, and that we should suggest remedial measures with caution is a large part of the message that I wish here to bring to you.

"Another proposal put forth by representative members of the nursing and medical professions with a fervor which after developments will, I believe, hardly justify, is to establish a second class of nurses. The trained attendant, in the minds of some of my good friends, will furnish the conclusion of our 'film' of tragic trouble which will permit us to 'live happily ever after.' If there were any remote probability that the creation of a second class of nurses would supply the demand for nursing service, I should be the first to advocate the innovation, but I am not able sufficiently to perceive the light to see anything but an opposite result than the one we all desire, if we give ourselves up to the unqualified advocacy of this expedient. There is undoubtedly a place for the attendant and the ward maid, but it is not in the field of nursing—that is, if my conception of the field of nursing is correct; as well to advocate a second and inferior class of medical attendant to take the place of the competent physician, or to urge the creation of a new worker in the field of theology to supply the need for the inspired clergymen, such a worker to be known, perhaps, as a spiritual advisor, second class, or something more euphonious but all to the same purpose. The attendant may assist the nurse, may substitute for her in emergency, but she can never take her place or fulfill her obligations.

What then is to be done which will hold out any hope of success in supplying the demand for nurses? That the demand is relative, as before mentioned, is of no consequence. We need more nurses and in the future we shall need increasingly more nurses.

"Let us return to fundamental facts. At the present time in this country innumerable opportunities are open to young women, especially to young women with education, ability and vision. The institutions of learning are overcrowded. Might it not be logical to as-

sume that if the training school becomes an institution of learning, it will attract such numbers of the right kind of young women that we shall suffer an embarrassment of riches? If the training school actually becomes primarily an educational institution, and, through adequate publicity, young women can be made to realize that in the nurses' training they will obtain a liberal education, most of our difficulties will disappear. In this connection the policy of the army in securing nursing service is well worth serious study. Nurses were needed and needed badly. There were those who held that the only solution to the problem was to recruit enormous numbers of young women who could serve, picturesquely of course, as nurses' aids. Fortunately there were those in control whose judgment was not befogged by the clamour for an immediate solution of the problem as it existed two years ago. The problem could not be solved immediately, any more than it can be now. However, it was solved expeditiously and logically by recognizing the underlying problems. The standards were not lowered and the outcome was most successful. The combination which secured the result was the assurance given that a liberal education would be furnished and the means taken to make this policy known to the young women of the country who wanted to be of service to humanity and who had the necessary qualifications to serve intelligently.

"In order to arrive at a reasonable conclusion regarding the necessary educational qualifications of the nurse, one should have a somewhat intimate knowledge of the development of nursing education in the last twenty years. Nursing has received recognition as a distinct profession only within recent years, and it is quite to be expected that in the ranks of the profession itself, to say nothing of those outside, there may be widely divergent views as to the future preparation and qualifications of the representative nurse. It has been intimated, even by those who are nurses, that we have gone too far in an attempt to exalt nursing as a profession; that nurses have disqualified themselves by over-education to do the things that nurses are expected to do. Personally I cannot subscribe to any such view. It has been my experience

that, with few exceptions, women who have been the most highly educated are the most ready to assume the obligations to which nurses should subscribe. If I interpret my experience erroneously, then all of the efforts to raise the standards of nursing service and the educational qualifications of the nurses are worse than wasted and you who are here may get what consolation you may out of the satisfaction that comes from an honest desire to have been of service, but, having been misguided, you have failed in your mission. Certainly no greater degree of altruism has been shown by any group of men or women than has been apparent on the part of the leaders in nursing of the country. Surely this spirit of service to others, has been worthy and just as surely has it not been unfruitful. While it is true that we are in a transition period, the future will justify all of the labor and thought that you have given to establish nursing on an enduring basis.

"To you, who have made the long struggle which has brought the profession of nursing to its present honorable position, I would say that there is no cause for discouragement. It will take time and continued effort to accomplish all of the things that you want to do and that you have planned to carry out. Nursing education must continue to evolve further. The training will inevitably be changed. The special education of the nurse will begin, not in the hospital, but in the college or special school where the time is given over entirely to preliminary instruction. In her first year of special training, the nurse need not necessarily see the inside of a hospital, if such preliminary training is properly designed to meet the after needs. Hospital service will, in effect, represent only the practical training of the nurse. The hospital will get better results and the student an infinitely better education. Perhaps I am over-confident in the prospects for the future, but I know that those of you who are most forward-looking agree with me. After all, your profession, like all others, needs members with vision who are not visionary, and who, with an insight into the future, will maintain, without giving ground to movements which at the moment may seem expedient, a firm determination to

establish on a strong foundation the profession for which you have given so abundantly and sacrificed so much."

Publications Received

REFRACTION AND MOTILITY OF THE EYE. with chapters on color blindness and the field of vision by Ellice M. Alger, M. D., F. A. C. S., Professor of Ophthalmology at the New York Post-graduate Medical School, etc. 400 pages; 125 illustrations. F. A. Davis & Co., Philadelphia. Price \$2.50 net.

This work is designed for students and practitioners and covers in a most comprehensive manner the field of Optics, Refraction, Ophthalmoscopy, Retinoscopy, normal and defective motility, etc.

The man who neglects the fundamentals in his eagerness to work on patients and do operations rarely acquires more than a smattering of his subject and this work answers this urgent need for those who are doing or contemplate doing eye work. Not only that but it is of practical usefulness to the general practitioner in acquainting him with conditions he meets daily that need correction.

PRACTICAL MASSAGE AND CORRECTIVE EXERCISES.—By Hartvig Nissen, for twenty-four years Lecturer and Instructor of Massage and Swedish Movements at Harvard University Summer School, author of many works on his subject. Fourth revised edition; 225 pages; fully illustrated. Price \$2.00 net. F. A. Davis Co., Publishers, Philadelphia.

This edition represents the results of 45 years' study of the subject of Mechanotherapy. The author has made this book true to name, "Practical Massage." He has combined what he considered best and most useful in other systems and also much that is original.

After a history of the subject and an explanation of the fundamental principles he takes up active and passive movements of arms, legs and trunk—massage, applied anatomy and corrective exercises.

BACTERIOLOGY FOR NURSES.—

Harry W. Carey, M. D., City Bacteriologist, Troy, N. Y.; Pathologist to the Samaritan and Cohoes Hospitals, Troy, N. Y. Second revised edition; 150 pages; well illustrated. Price \$1.25. F. A. Davis & Co., Publishers, Philadelphia.

The basis of this work is the lecture notes the author has used for the last eight years teaching the subject to nurses in the hospitals with which he has been connected. He does present quite clearly and in simple language that portion of the subject which is essential for nurses to know. Some of the chapter subjects are: History of Bacteriology, the Classification, Morphology, Biology and Distribution of Bacteria, Sterilization and Disinfection, Infection, Immunity, Bacteria causing acute infections, Bacteria causing chronic infections, the Bacteria in water and milk, the Technique of Preparations, for the collection of material for examination.

SHORT TALKS ON PERSONAL AND COMMUNITY HEALTH—

By Louis Lehrfeld, M. D., Agent for the Prevention of Disease, Department of Public Health, Philadelphia. 270 pages. Price \$2.00 net. F. A. Davis & Co., Philadelphia.

Public health education is the foundation upon which rests the future progress of preventive medicine.

This book is a series of short talks on nearly every phase public health and is prepared and presented for the purpose of promoting public health education.

The health officer cannot enforce his principles of sanitation and hygiene unless he can first make his community understand the importance of the various problems with which the public is confronted.

These talks will serve as a guide for lectures by public health workers with the object of teaching the public how to prevent rather than treat disease.

We all want friends who will expect much, who will have faith in us, who will speak helpful words to us, who will inspire us. We need inspiration more than we need information.

To have "principle" adds to the "interest" of business.

News Items

ROBESON COUNTY.

Dr. N. A. Thompson of Lumberton was elected to Fellowship in the American College of Surgeons at their meeting in Montreal last month. He returned from the meeting Oct. 20th.

Dr. Thompson will leave Nov. 8th for Rochester, Minn., where he will spend three or four weeks attending the Mayo clinics.

The annex to the Thompson Hospital is now completed and ready for patients. This makes an addition of twenty rooms to his hospital.

Dr. R. S. Beam has returned to his home in Lumberton after spending six weeks attending clinics in Eye, Ear, Nose and Throat in London.

The County Medical Society will meet in Lumberton Nov. 10th. Papers will be read by Drs. R. D. McMillan of Red Springs; H. L. Price of Fairmont and T. L. Costner of Lumberton. Officers for next year will be elected at this meeting.

Dr. A. H. Hays of Fairmont has returned from Atlanta, where he spent a short vacation.

After a six weeks' vacation Dr. H. T. Pope has returned to his home in Lumberton.

The U. S. Social Hygiene Exhibition, co-operating with the N. C. State Board of Health and Robeson County Board of Health, have just completed a successful seven weeks' campaign in Robeson county. Dr. W. H. Gillette of the U. S. Public Health Service was the lecturer with the exhibition. He estimates that over fifteen thousand people attended the lectures.

The County Board of Health put on an excellent public health exhibit at the Robeson County Fair, held in Lumberton, Oct. 12th to 22d.

JAS. A. MARTIN,
Sec. and Treas.

HENDERSON COUNTY.

The State Board of Health held an adenoid and tonsil clinic at the Patton Memorial Hospital, Hendersonville, for five days, beginning Oct. 26th. Ninety-eight children were operated. Dr. David Sloan, Wilmington, N. C., operator, R. C. Sample, Hendersonville, anesthesiologist.

At a meeting of the Tenth District Medical Society, held in October at Asheville, N. C., Dr. Guy E. Dixon, of Hendersonville, was elected as one of the vice-presidents of the society.

R. C. SAMPLE.

RUTHERFORD COUNTY.

The typhoid campaign just finished in this county resulted in about 3,000 completed cards for the State Board of Health.

Dr. Schenck, who conducted it, is just starting to Columbus county to take charge of similar work there.

The regular monthly meeting of the County Medical Society was held yesterday in Dr. Twitty's office. Three new members were added to our roll, Dr. R. H. Crawford, Rutherfordton; Dr. T. C. Lovelace, Henrietta, and Dr. Bobo Scruggs, of Cliffside.

WAYNE COUNTY.

As information, beg to advise that the Wayne County Medical Society met Thursday, Oct. 14, 1920, at 6:30 p. m. in the Chamber of Commerce room, Goldsboro, at which time a barbecue was served, in the Wayne county style, to the members present, fifteen in number. After the "Cue" was served the society was called to order by the president and the members reported many interesting cases coming under their observation and treatment since our last meeting.

The society will hold another meeting next month at which time two members of the society will read papers covering their work with cases coming under their observation and treatment.

Wayne County Medical Society now consists of 27 active and two honorary members. Many of its members have taken post-graduate work in their specialties within the past six months. This is a good index as to the progressiveness of the profession composing this society. Every medical society should encourage its membership to avail it-

self of every opportunity to pursue post-graduate work.

Respectfully,
C. F. STROSNIDER,
Sec.-Treas.

MECKLENBURG COUNTY.

At a recent meeting of the society, Dr. James W. Gibbon and Dr. E. R. Hipp were elected members. This brings the society membership up to 106.

A picture of Dr. William Osler has been presented to the society by Dr. I. W. Faison at the same time when the biographical sketch (published in this issue) was read by Dr. J. P. Munroe.

CHARLOTTE NURSES TO START CENTRAL DIRECTORY NOV. 15.

St. Peter's Hospital played hostess to the regular monthly meeting of Charlotte district branch of the North Carolina Nurses' Association Wednesday afternoon, Nov. 3. About 35 members of the district branch having been present and 11 nurses added to the membership.

Announcement was made at the meeting that the central directory for the nurses of the district will be put in operation by the middle of this month, probably in charge of a private duty nurse. Further plans for the directory will be announced later.

The principal talk of the afternoon was made by Dr. B. C. Nalle, who spoke of the relation of the doctors to the nurses and the duties of one profession toward the other and toward their patients.

Refreshments were served during the afternoon under the direction of Miss C. E. MacNichols, superintendent of St. Peter's Hospital. Her sister, Miss Ella MacNichols, formerly superintendent of the Presbyterian Hospital, was a guest.

Out-of-town members present included Miss Ward and Miss Bradford, of Gastonia, and Miss Ramsay and Miss Suelenwood, of Lincolnton. Miss Estelle Torrence, president, presided at the meeting.

The next meeting, on the first Wednesday in December will be held at the Charlotte Sanatorium, when Miss Corlenia Mims, the superintendent, will be hostess.

**Dr. J. E. Foscue of Guilford County
Died Nov. 10.**

Dr. J. E. Foscue, of Jamestown, one of Guilford county's most popular and best known physicians, dropped dead as he left a home in the Oakdale Mill village where he had gone to make a call. Dr. W. M. Jones, county health officer, who was accompanying Dr. Foscue on a tour of the mill village in the interest of better health conditions, was at his side and endeavored to aid the stricken man, but without success.

Coming to Jamestown more than 15 years ago from Eastern North Carolina, Dr. Foscue had won for himself a reputation among the physicians of the county. He was well known in High Point and had a large practice in this section. He was a man of remarkable abilities and the news of his death will be learned with keen regret by his friends in this county and other parts of the State.

Dr. Foscue was about 40 years of age and is survived by the widow and four children. He was a member of the Guilford County Medical Society and the State Society and enjoyed marked prominence in medical circles of the section.

Dr. Banks Withers, prominent Mooresville physician, died November 6th at the Charlotte Sanatorium following an operation for appendicitis. His condition had become so serious that the operation did not relieve him.

Dr. Withers was born in Mecklenburg County, near Davidson, his people having moved to Davidson while the children were young. He graduated at Davidson college in 1887, taught school for two or three years and took his medical course at the University of Maryland. Soon after completing his medical course, Dr. Withers began the practice of his profession at Enocsville, where he remained for about twenty-four years. He moved from there to Mooresville about two years ago. He was engaged in general practice.

Dr. Withers is a brother of Dr. W. A. Withers, vice-president of North Carolina State College, Raleigh, N. C.

Dr. L. E. Hockette, of Charlotte, N. C., announces the association in practice of Dr. Thomas Art Smith.

Dr. Smith is an alumnus of the Medi-

cal College of Virginia, and a post-graduate of the New York Post-graduate Medical School and Hospital, where he did special work in Pediatrics.

Dr. Smith is a native of Union county, North Carolina, and is a scion of one of Union's oldest and most respected families. He is a gentleman of high worth and integrity and a valuable addition to the profession in North Carolina.

Dr. V. M. Matthews has located in Charlotte and is associated with Dr. R. M. Gallant, with offices at the Belmont Pharmacy.

Dr. Matthews is a brother of Mr. Frank Matthews, general manager of Belk Bros. chain of stores. He is a graduate of Washington and Lee University and took his medical course at the University of Pennsylvania, graduating in 1918. He was 18 months in the Navy, spending one year in U. S. Naval Hospital, Philadelphia, and six months at sea. After discharge from the service he was six months in the Lying In Hospital and four months resident obstetrician at Bellevue.

The annual session of the Tenth District N. C. Medical Society was held at Asheville, N. C., Oct. 14, 1920, with about 75 in attendance, Dr. C. E. Cotten, Asheville, president, and Dr. W. J. Hunnicutt, secretary. Several excellent papers were presented and discussed. Of special interest was the recommendation of Dr. Carl V. Reynolds, health officer, Asheville, to the effect that the State should exercise a more active part in supervising public health in general in addition to its present activities in the communicable diseases. A reception was given at the Merriweather Hospital followed by a banquet in the evening at the Battery Park Hotel. Three sessions will be held annually hereafter, the next being at Canton in April, 1921. The following were elected for the ensuing year:

President, Dr. F. L. Siler, Franklin; vice-presidents, Drs. Guy S. Kirby, Marion; C. E. Dixon, Hendersonville, and Chas. Z. Candler, Sylva; secretary, Dr. W. J. Hunnicutt, Asheville.

Dr. A. B. Greenwood and Dr. Jas. A. Keiger announce the opening of offices, 311-12-13 Dixie Building, for the prac-

tice of Urology, Syphilology and Dermatotomy. Hours 9-1; 3-6 and 7-8.

Greensboro, N. C., Oct. 1, 1920.

Dr. J. J. Phillips, Raleigh, N. C., is doing special work in paediatrics in Boston and New York for a few months preparatory to devoting his entire time to that specialty.

Dr. J. R. Whelan, Spring Hope, N. C., experienced with his wife and child a recent narrow escape from an automobile accident. The doctor's machine was wrecked.

Dr. Hugh H. Black, Spartanburg, S. C., son of Dr. W. S. Black, for two years past a student in the Mayo Clinic at Rochester, Minn., has, after a short vacation in the Carolinas, resumed his duties at the clinic.

Two young men of Greensboro, N. C., were recently arrested and in default of bond placed in jail charged with the theft of eighty-four cases of whiskey from the Glenwood Sanitarium in that city.

D., U. S. A., Ft. McPherson, Ga. Healey Building, Atlanta, Ga.

The laboratories of Drs. Bunce and Landham announce the association of Dr. George F. Klugh, formerly of the laboratory staff, U. S. General Hospital No. 6 and department laboratory, S. E.

Believing Chemo-Therapy to be a rich field for the development of products of great therapeutic value, and that we have so far neglected to give it the importance that past researches would warrant, we are placing this department at the disposal of all those who may find an interest in the subject, as an open forum where contributions dealing with this science will be welcomed.

Medical Supplies Sold.

The War Department authorizes publication of the following from the office of the director of sale:

The Surplus Property Branch, Office of the Quartermaster General of the Army, has sold to Thomson & Kelly Co., of Boston, the remaining surplus of bandages and absorbent cotton, pur-

chased for the use of the Army during the war. The sale netted the Government more than \$1,000,000. The bandages alone represent a quantity sufficient to supply the hospitals and surgeons of the United States with all their needs for at least 18 months. The Boston firm was the highest of a number of bidders for these items. Included in the sale were a million dozen roller and between two and two and one-half million compressed bandages, and approximately 2,250,000 one-ounce packages of absorbent cotton.

New Home for National Academy of Science.

A site for the new building in Washington which is to serve as a home for the National Academy of Sciences and the National Research Council has recently been obtained. It comprises the entire block bounded by B and C streets and Twenty-first and Twenty-second streets, Northwest, and faces the Lincoln Memorial in Potomac Park. The Academy and Council have been enabled to secure this admirable site, costing about \$200,000, through the generosity of the following friends and supporters: Thomas D. Jones, Harold F. McCormick, Julius Rosenwald and Charles H. Swift, Chicago; Charles F. Brush, George W. Crile, John L. Severance and Ambrose Swasey, Cleveland; Edward Dean Adams, Mrs. E. H. Harriman and the Commonwealth Fund, New York City; George Eastman and Adolph Lomb, Rochester; E. A. Deeds and Charles F. Kettering, Dayton; Henry Ford, Detroit; Arthur H. Fleming, Pasadena; A. W. Mellon, Pittsburgh; Pierre S. du Pont, Wilmington; Raphael Pumpelly, Newport; Mr. and Mrs. H. E. Huntington, Los Angeles; Corning Glass Works, Corning, New York. Funds for the erection of the building have been provided by the Carnegie Corporation of New York.

Nurses Needed by the Public Health Service.

The U. S. Public Health Service needs hundreds of graduate nurses for its general hospital work but also and particularly for the care of former soldiers suffering from nervous and mental disorders. So great is its need for the latter class that it is probable that at present enough trained nurses are not avail-

able in the country. The Public Health Service accordingly purposes to establish a training school for nursing in neuro-psychiatric diseases in its special hospital (No. 49) on Gray's Ferry Road, near Philadelphia, where nurses with general training may take a special course in this class of work. This hospital has a capacity of 240 patients and will afford exceptional opportunities for instruction in the most modern treatment.

An appeal is made to nurses to come forward for this work; for if they do not do so there seems to be no one to take their place. The hospitals now operated by the U. S. Public Health Service are already 150 nurses short; and the service faces the necessity of opening several new ones with an adequate force. Applications should be made to the Surgeon General, U. S. Public Health Service, Washington, D. C.

A New Department.

Beginning with the January issue, the Medical Review of Reviews of New York will inaugurate a new department for the advancement of the science of Chemo-Therapy.

In order to develop the theories as set forth by the various investigators who have thus far entered this field, we invite the co-operation of all physicians, chemists, bacteriologists and pharmacologists who are doing or contemplate doing work along these lines.

It is our purpose to stimulate a more thorough fundamental knowledge of this subject, which so far is little known to a great number of practicing physicians.

SOUTHERN RAILWAY DOUBLE TRACK.

An interesting item in the 1919 annual report of the Southern Railway Company, recently issued, is the statement concerning the completion and cost of the double track and grade revision of the Atlanta-Washington line.

The distance is 637.5 miles, and this work cost \$52,134,000.000.

The double track is all in operation and has materially enlarged the capacity for handling both freight and passenger traffic expeditiously. The grades and curves on the entire line have been reduced and established on the standard basis so as to produce the best results

both for the handling of heavy freight trains and for the comfortable movement of passenger trains. The maximum grade on the entire line is one per cent and the maximum curvature is 6 degrees, except between Charlottesville and Lynchburg, Va., there is a grade of 1.43 per cent and also at a point south of Danville, Va., near the North Carolina line, there is a grade of 1.25 per cent. The entire line is equipped with electric automatic block signals of the most improved kind. The train dispatching on the entire line is also facilitated by telephone as well as telegraph connections between the stations. These electric block signals not only add to the safety but also in many cases avoid delays to both passenger as well as freight trains.

The double tracking of the Southern Railway between Atlanta and Washington is the biggest single industrial development that has been accomplished in the south and in doing this work in anticipation of the great industrial development of the Southeast the Southern Railway has not only strengthened its position in the railroad world but has also contributed largely to the everyday welfare and development of the country which it serves.

Home Service Extension.

A feature of Red Cross work which has been greatly extended the past year is the Home Service in the families of civilians, patterned after the Home Service which rendered assistance to 800,000 families of soldiers and sailors during the war.

This service is furnished only where there is no other established agency for performing this especial class of public service, and is confined to chapters of the Red Cross which comply with certain restrictions intended to maintain standards and perpetuate the work. Approximately 1,000 chapters have made application for such authority and 573 have been given the desired permission. This plan of extension contemplates not only the conduct of general family welfare work, but the seeking out and developing of demands for other forms of community service and securing the co-operation of specialized organizations to fill these needs.

"I" is at the centre of happ-i-ness.

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Quotations from Doctors: No. 7

"The majority of cases of pneumonia, in my experience of thirty years' medical practice have had more or less pleuritic complications.

"I presume this is the experience of my colleagues.

"The most grateful application that can be made to a patient suffering with pneumonia is a warm



poultice under a moderately firm binder or jacket. Its action is, first through the superficial vessels, and then more slowly but just as efficiently on the deeper congested parts."

J. A. H., M. D.,
NEW YORK CITY, N. Y.

THE DENVER CHEMICAL M'F'G. COMPANY
NEW YORK

Diagnosis of Disease of Gallbladder.

The more characteristic biliary tract syndromes are summarized by Lewellys F. Barker, Baltimore (Journal A. M. A., Oct. 23, 1920) as follows:

Acute Cholecystitis (Mild.) — Mild "indigestion;" slight pain and tenderness in the right hypochondrium; sometimes, a palpable gall-bladder; slight fever and slight polymorphonuclear leukocytosis; symptoms often subsiding in a few days on rest in bed, light diet and local thermotherapy.

Acute Cholecystitis (Severe.) — Symptoms more severe than in the preceding; nausea and vomiting common; gall bladder distended and very painful on palpation as a rule; upper right rectus rigid; leukocytosis of from 12,000 to 20,000; fever; sometimes chills, especially if exudate is seropurulent; signs of peritoneal irritation; need of immediate operation. If the patient is very toxic, the gallbladder may be gangrenous. The condition may be mistaken for acute appendicitis or for acute peritonitis due to perforation of a gastric or a duodenal ulcer.

Chronic Cholecystitis, With or Without Gallstones.—Attacks of "indigestion" or "biliousness" ("gallbladder dyspepsia," "inaugural symptoms") with fulness, weight and distention after meals, relieved by belching, but often followed by soreness and stiffness in the right hypochondrium lasting a few days. Sometimes there are characteristic attacks of biliary colic, most often nocturnal, with severe pain in the epigastrium and in the right hypochondrium, radiating to the back and often to the right shoulder, accompanied by gaseous distention and often by vomiting; and not infrequently requiring morphin for relief. The gallbladder may or may not be palpable (it is often shrunken). Tenderness on pressure in the gallbladder area is usually present. Roentgenograms may, or may not, show the presence of gallstones; they may reveal displacement of the pylorus upward and to the right, and distortion of the duodenal cap or of the pyloric and of the stomach, especially if there is a complicating adhesive pericholecystitis. Impairment of the general health is common.

Acute Infectious Choledochitis.—After an attack of biliary colic, jaundice develops with enlargement of the liver,

tenderness in the midepigastrium and to the right of this, with fever and leukocytosis. If a stone is passed, the infection may subside quickly. Colic may or may not occur. Recurring pyrexia with chills and sweats (intermittent fever of hepatic origin) points to purulent cholangitis. There is persistent jaundice with bilirubinuria. The gallbladder is rarely palpable because usually small and shrunken from coexistent chronic cholecystitis. Operation is indicated.

Chronic Catarrhal Cholangitis (Calculus or Noncalculous).—Chronic intermittent jaundice; sometimes, attacks of biliary colic; fever may be absent, or temporarily present; slight leukocytosis in exacerbations; may be confused with (1) carcinoma compressing the ductus choledochus or (2) hypertrophic biliary cirrhosis.

Biliary Obstruction with Distention of Gallbladder Due to Chronic Pancreatitis or to Carcinoma of the Head of the Pancreas. — Maximal jaundice (after gradual onset and steady increase without recession) with complete intestinal acholia, bilirubinuria and pruritus; usually entire absence of pain and fever; large, easily palpable gallbladder. Sometimes, a tumor is palpable in the epigastrium. Tendency to emaciation and cachexia greater in carcinoma than in pancreatitis. Glycosuria present in 25 per cent of the cases. Operation indicated, and often too long delayed in the hope that only catarrhal jaundice exists.

Hydrocholecystosis or Chronic Remittent Cholecystosis (With or Without Stones in the Gallbladder).—Brief attacks of pain without fever, recurring for months or years in the right hypochondrium, synchronous with recurring distention of the gallbladder, but without signs of local or general infection (Berg). A Riedel's lobe may be palpable, and, if so may be mistaken for a mobile kidney, a hydronephrosis or a neoplasm.

Carcinoma of the Gallbladder.—Nodular mass palpable in gallbladder region, appearing in a patient who has earlier shown signs of cholecystitis or of gallstones; jaundice in 75 per cent of the cases; ascites in 25 per cent; metastases in the liver may occur early; cachexia is common. Operation, unless performed very early, rarely saves the

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Milk for Children.

Newer knowledge of nutrition brings to light the scientific basis of nature's method of feeding the growing infant. Milk is the natural food for the child. The importance of this fact cannot be over-emphasized. Milk contains substances constantly necessary for the proper growth of the child. Stint his milk supply and you stunt his growth, and do him an irreparable injury. The importance of abundance of milk for the child is so great that the state could consistently and well afford to subsidize the dairies, and reduce the price of milk to a nominal sum. Every public school should have a dairy depot to which the children could have unrestricted access; a public fount as it were. Probably then the corner candy store would not be patronized so freely, a result that would be of no disadvantage to the pupil. "Less candy, more milk, better teeth."—North American Journal of Homeopathy.

Dental Irritation.

Lurie, in the Boston Medical and Surgical Journal, says an irritation may cause an increase in salivary activity to such an extent that when food is introduced there is no response to the additional stimulation. Such lack of digestion is recognized as due to a decrease of ferment concentration. An infection may be the underlying factor in the causing of an acid reaction in the mouth sufficient to inhibit the activity of the saliva when it is poured into the mouth. The effect of an oral infection or irritation is not necessarily only a local one, or on digestion entirely. Toxines, as well as bacteria from an infected site in the mouth, are carried everywhere by the blood stream. Changes in glandular tissue throughout the body may result, and the ductless glands may be affected under the stress of oral irritation and infection. The superficial infections and irritations incident to dentitions lower the resistance of the child, at least temporarily. The various forms of streptococci which inhabit the mouth normally may assume a transmuted form and under the proper conditions assume a predominant proportion in the case, and appear as the exciting cause

of the infection. Infections about the mouth are more common than any other conditions about the body. From an almost insignificant marginal infection about the gum of the molar teeth, there may develop a painless and symptomless extension into the deeper fasciae, as the temporal, masseter or platysmal. These infections may extend to the development of a deep-seated phlegmon, or present more minor symptoms. Many times teeth are unnecessarily sacrificed for such conditions, when a little attention to the local condition in the mouth and the care of the infected fascia either surgically or otherwise, as indicated, would have cleared up the case. At times such infections produce a great amount of local swelling, but there is very little pus formation. Lurie emphasizes that mouth conditions have a medical aspect just as certainly as does any other part of the body, and that as such the mouth is a field worthy of the special practice of the physician.

End-Results of Focal Infection.

In a paper on this subject based upon a personal experience of 100 cases, Bryce W. Fontaine, in the Medical Record, states that while in the past there has been a failure to recognize focal infection, now the pendulum has swung too far. In his series of cases the most common location of the focus of infection was the teeth, affected with such conditions as pyorrhea, granulomas, apical abscesses, etc. The tonsils were second in importance as the seat of infection. The sinuses were less frequently the seat of infection, but of the sinuses, the maxillary was most frequently involved owing to its proximity to the teeth. Pain in the muscles of the shoulders and chest was the most frequent symptom. Fever, seldom over 101 degrees F., was secondary in importance, occurring in 18 per cent of the cases and not often accompanied by chills. A few cases complained of night sweats. Chronic headache was present in four per cent of these cases and anemia in four per cent. The blood in a large percentage of the cases showed a moderate reduction in hemoglobin and in the erythrocytes with a normal leucocyte count. Six cases showed achylia gastrica estimated by the fractional method.

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Abdominal Hernia.

Watson, in the American Journal of Surgery, says infection is undoubtedly the most frequent cause of recurrence. Coley says that with the use of rubber gloves and the greatest possible care in maintaining an aseptic technique, he obtains ninety-eight per cent of aseptic healing of wounds.

A truss should not be worn after operation. It has a tendency to cause thinning and atrophy of the muscles and newly formed scar tissue, thus favoring recurrence when it is finally discarded. In cases where the hernia is large and the closure of the opening difficult, the use of an elastic support or bandage for a few months is often recommended.

Extreme old age and organic disease of the heart, lungs, or kidneys were formerly believed to be contraindications to the radical operation, but with a good technique there is practically no contraindication to the cure of every hernia regardless of the age of the patient. Some of the best results in my private practice have been in patients over seventy years old. In over five thousand major operations under local anesthesia at the New York Polyclinic Hospital, there has not been a single death from the anesthetic.

Ipecac Sensitization and Bronchial Asthma.

An unusually rare type of protein hypersensitization causing anaphylactic bronchial spasm is cited by M. Murray Peshkin, New York (Journal A. M. A., Oct. 23, 1920). The patient, a man, aged 29, pharmacist, twelve years before contracted an acute bronchitis which persisted throughout the winter and early spring. With the return of the cold weather each year, he would be again subjected to the bronchitic symptoms of previous winters, consisting of occasional wheezing, dry cough and slight dyspnea, with intervals of relief from one to seven days. In the fall of 1919, bronchitis set in as usual. In December, the patient first complained of much running of the nose, followed by an irritating and distressing dry cough, and respiratory oppression. Soon after, he experienced for the first time a typical bronchial spasm. He observed that these symptoms would come on when working in the drug store, and especially when compounding powders. Skin

tests performed with many drugs in powder form commonly employed during the recent influenza epidemic were negative, except pulvis ipecacuanhae et opii (Dover's powder), which gave positive reaction. It was determined eventually that ipecac was the offending drug. This case demonstrates the importance of making inquiry into the occupation of asthmatics.

Trachoma.

Trachoma is a reportable disease in many states. John McMullen, Louisville, Ky. (Journal A. M. A., Oct. 23, 1920) says that surveys in numbers of states have been made by the Public Health Service, and trachoma has been found to be prevalent in many. A number of states have taken up the trachoma problem and appropriated money to combat the disease. In co-operation with the several states, free trachoma hospitals have been established in Kentucky, Virginia, West Virginia Tennessee and North Dakota. An eye specialist is in charge, and a corps of trained nurses are on duty in each of these hospitals. In addition to these hospitals, field clinics have been conducted in these and a number of other states. The results have been exceedingly satisfactory. About 9,000 cases of trachoma have been treated at these hospitals, the ages of the patients varying from infancy to old age. The number of hospital cases does not include the field clinics. Eighteen field clinics have been held during the last seven months; 825 operations were performed, 559 under general, and 266 under local anesthesia.

Carbolic Acid for Ringworm—Dr. J. G. L. Meyers (The Medical World) recommends the use of carbolic acid for ringworm (trichophytosis) when other remedies fail. The remedy should not be trusted to the hands of the patient, but applied only by the physician. Usually a 25 per cent solution is strong enough. Even that will turn the skin white and perhaps cause some exfoliation, but not a permanent disfigurement. A single application has cured inveterate cases for him. Where the ringworm is on the body under the clothing, all such clothing should be boiled, or at least thoroughly beaten and aired where boiling is undesirable.

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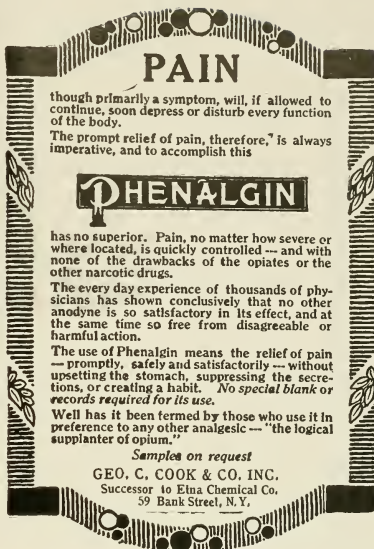
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Rest as a Therapeutic Measure.

When Weir Mitchell proposed the "rest cure" for the neurasthenic, he propounded no new principle in therapeutics but made of rest a ritual and thereby secured the patient's co-operation. It is interesting in this connection to read an extract from a letter written to Sir Philip Rose in 1846 by Benjamin Disraeli, later Earl of Beaconsfield and prime minister of England. Both great men suffered at times from what is commonly called "nervous breakdown." Rose had just returned from a trip abroad to recover from one of these attacks. Disraeli says:

"My present condition of health and career may convince you that there is more of distress than danger in these exhaustions of the nervous system. But if not duly checked, the trial they inflict is severe. Repose is the best medicine, and we should guard against the belief that there is any cure for them but a gradual one. Repose, however, is a rare medicine, and impatient suffering is too apt to take refuge in quacks."

If all laymen were intelligent—if all could realize that processes of repair in human tissues are not miracles but gradual evolutions in natural processes, which the physician assists and augments—the task of the physician would be less difficult.—*Journal A. M. A.*, Sept. 4, 1920.

Mydriatic Action of Atropine.—Kunz-Krause ("Pharm. Zentralh") writes that solutions of atropine salts are physiologically stronger than tincture of belladonna or extract of belladonna containing the same amount of alkaloid. This is due to the tannoids, pectins, etc., present in the plants which act as protective colloids and retard the absorption of the alkaloid by the lachrymal liquid.

Care of Whooping Cough Patients.

The whooping cough patient should be kept indoors at a temperature of 65 degrees F., with fresh air, but no draft. The bedroom must not be cooler than 65 degrees F. Variations in temperature induced repeated coughing attacks and complications, and it was the complications that were responsible for most of the fatalities of whooping cough. Codeine and bromides might be given. After whooping cough children

were extremely susceptible to repeated attacks of bronchitis and were also predisposed to tuberculosis.—*Dr. Wintress*—*Medical Record*, New York.

The Poison of the Ant.—Tschirch ("Schweiz, Apoth. Zeit.") reports that the poison of the ant is an enzyme-like toxin and that the formic acid acts only as an activator of and protective for the poison, which is destroyed by alkalies. He believes that the poison of other insects is of a similar nature and that an immediate treatment of bites by insects with ammonia water is therefore rational.

A Pleasant Saline.

Dr. Earp, in "Western Medical Times," offers the following:

Magnesia sulphate	1 lb.
Granulated sugar	6 oz.
Arom sulphuric acid	1 fl. oz.
Citric acid	90 grs.
Water q.s. to make.....	1 qt.

Dissolve magnesia sulphate and sugar in one pint of hot water and add acids, and the water q.s. to make one quart, and filter.

It is more pleasing to the palate than most solutions of a like character, the astringency and stimulation to the mucous membrane by the acid gives it an advantage, there is greater certainty to evacuation; if given in proper doses, suitable to the patient's condition, there need be no continuous watery stools, and I do not hesitate to say that, in my opinion, it is the most efficient and reliable of all the salines.—*The Medical Summary*.

Applied Anatomy.—"The human anatomy is a wonderful bit of mechanism," observed the Sage.

"Yes," agreed the Fool. "Pat a man on the back and you'll make his head swell."—*Cincinnati Enquirer*.

Abscesses.—If a mixture of equal parts of a fluid extract of aconite, opium and belladonna be brushed over a location where an abscess is forming, the abscess will be avoided.—*Ellinwood*.

Castor Oil Palatable.—To make castor oil palatable, mix an ounce of castor oil with an ounce of glycerin and add two drops of the oil of cinnamon. Children take this as a luxury and ask for more.—*"Med. Summary."*

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The United States Civil Service Commission announces an open competitive examination for physician on the dates stated above, at the places listed hereon. Vacancies in the Panama Canal Service at the salaries indicated below, and in positions requiring similar qualifications, at these or higher or lower salaries, will be filled from this examination, unless it is found in the interest of the service to fill any vacancy by reinstatement, transfer, or promotion.

Salary—The entrance salary is \$250 a month; promotion may be made to \$275, \$300, \$325, and \$360, and to higher rates for special positions. The salary begins on date of sailing for the Isthmus, and free furnished bachelor quarters are supplied on the Isthmus. Meals may be obtained at the Government restaurants on the Isthmus at 40 cents each and upward.

Leave of Absence—A maximum of 61 days' leave with full pay may be allowed for each year's service.

Citizenship and Sex—All citizens of the United States who meet the requirements, both men and women, may enter this examination; appointing officers, however, have the legal right to specify the sex desired in requesting certification of eligibles. For the Panama Canal Service male eligibles are desired.

Subjects and Weights—Competitors will be examined in the following subjects, which will have the relative weights indicated:

Subjects.

Weights.

1. Anatomy and physiology (regional and minute anatomy, general physiology, the physiologic functions and relations of organs) ----- 10
2. Surgery and surgical pathology (general and special surgery, surgical diagnosis, pathology, treatment, and technic)----- 20
3. Chemistry, materia medica, and therapeutics (elementary questions in inorganic and organic chemistry, the physiologic action and therapeutic uses and doses of drugs)----- 10
4. Bacteriology and hygiene (the technic of bacteriologic laboratory methods and the prac-

tical application of the principles of bacteriology and hygiene to prophylaxis and treatment) -----	15
5. General pathology and theory and practice of medicine (the etiology, pathology, symptomatology, and treatment of diseases -----	20
6. Obstetrics and gynecology (the general practice of obstetrics, diseases of women, their etiology, pathology, diagnosis, symptoms, and treatment, medical and surgical)-----	10
7. Training and experience-----	15
Total -----	100

Training and Experience—Applicants must have graduated from a recognized medical school whose graduates are eligible for commission in the United States Army and must have had at least one year's post-graduate hospital experience.

Statements as to training and experience are accepted subject to verification.

Age—Applicants must have reached their twenty-second but not their thirty-first birthday on the date of the examination. Age limits do not apply to persons entitled to preference because of military or naval service.

Retirement — Classified employees who have reached the retirement age and have served fifteen years are entitled to retirement with an annuity. The retirement age for railway mail clerks is 62 years, for mechanics and postoffice clerks and carriers 65 years, and for others 70 years.

Photographs—Applicants must submit to the examiner on the day of the examination their photographs, taken within two years, securely pasted in the space provided on the admission cards sent them after their applications are filed. Proofs or group photographs will not be accepted. Photographs will not be returned to applicants.

Physical Examination—Before being permitted to sail for the Isthmus appointees must undergo a rigid physical examination by a designated physician after the appointment has been actually issued. There will be no charge for this examination, but the appointee must pay his transportation to the place of examination. The official physicians



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Applications—Applicants should at once apply for Form 1312, stating the title of the examination desired, to the Civil Service Commission, Washington, D. C., or to the Secretary of the United States Civil Service Board at any place listed hereon. Applications should be properly executed, including the medical certificate, but excluding the county officer's certificate, and filed with the Commission at Washington, D. C., in

time to arrange for the examination at the place selected by the applicant.

The exact title of the examination, as given at the head of this announcement, should be stated in the application form.

Applicants entitled to preference should attach to applications their original discharge, or a photostat or certified copy thereof, or their official record of service, which will be returned after inspection by the Commission.

Issued October 26, 1920.

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A Note on the Later History of Four Cases of Total Laryngectomy.—Sir Charters Symonds reports four cases, three men and one woman, who have lived in comfort and happiness, and who have done useful work, for 8, 12, 15½, and 22 years, respectively, after total laryngectomy. These records are of value also in showing the immunity that can be obtained even when the malignant disease is extensive. These people can be understood by those around them by simple lip-movements and the vibration of such an amount of air as can be taken into the mouth and pharynx, while with the speaking tube, which he describes, the patient can be heard in a large room. The immunity in these cases has been largely due, no doubt, to the wide initial removal of structures external to the larynx. The avoidance of preliminary tracheotomy certainly facilitates the operation, and, moreover, diminishes infection. The technique is also a matter of some importance. (The writer may describe this in a later communication.)—*The Lancet*.

Payne Buys the Forum.

New York, Oct. 25.—The Forum, a magazine which for thirty-five years has had the most prominent men of the country among its contributors, was today bought by George Henry Payne, well-known here as a friend and associate of the late Theodore Roosevelt, and recently opponent of Senator James W. Wadsworth, Jr., in the Republican primaries for the United States Senatorship. At the present time Mr. Payne is a commissioner of taxes for the City of New York, and within the month has published "The History of Journalism in the United States."

The change in the ownership of The Forum has attracted considerable attention because of the prominence and activities of the new editor who was one of the first to organize outside of the Senate against the League of Nations without reservations. He formed the Committee of American Business Men which included such national figures as Coleman DuPont, Julius Kruttschnitt, Otto H. Kahn, James M. Beck, L. F. Lorie, president of the Delaware and Hudson Railroad, Henry Tatnall, vice-president of the Pennsylvania Railroad, Jules S. Bache and Henry Rogers

Winthrop. Mr. Payne also organized and made the first fight against President Wilson's attitude on the Panama Canal Tolls.

In 1912 George Henry Payne was closely associated with Theodore Roosevelt as one of his New York managers, and up to the time of Col. Roosevelt's death was an intimate friend and in continuous touch with the Colonel on political matters. Previous to his entrance into politics with the Progressive party in 1912, he was political editor of the New York Evening Post. For the past year he has been one of the conspicuous leaders in the movement to nominate Leonard Wood, was a delegate to the Republican Convention in Chicago and was one of the floor managers for General Wood.

During the war, he was the New York State representative of the State Defence Council, appointed by Gov. Charles S. Whitman with whom Mr. Payne has also been closely associated for a number of years. Mr. Payne is a vigorous campaigner and speaker, and his recent literary work has been universally praised for its trenchant and incisive English. He numbers among his friends prominent public men and well-known editors in all sections of the country.

The November number of the Forum will be under Mr. Payne's editorship. One of the features announced for that edition is a definite program of tax reform by the foremost financier of America, Otto H. Kahn, of whom Theodore Roosevelt said only ten days before his death that "he (Mr. Kahn) is doing the clearest and soundest thinking in the country."

The Forum was founded thirty-five years ago by Isaac L. Rice, and under the editorship of the late Walter H. Page, ambassador to England, was one of the leading serious magazines in the English-speaking world.

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is the first consideration in the treatment of infected wounds. It is not difficult to kill most of the ordinary germs. The real difficulty is to kill the germs in an infected wound without at the same time injuring or destroying the bodily tissues. With Dioxogen, however, it is easy to accomplish this, for

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Red Cross "Budget" Shows Decrease for 1921.

The American Red Cross has outlined a "budget" for its program of relief and service for the fiscal year ending July 1, 1921, which calls for the expenditure of \$48,200,000. This is \$21,000,000 less than the amount spent in 1919-20, which was \$69,400,000.

In this budget \$31,500,000 is for relief in foreign lands, included in which amount is \$11,000,000 in purchased supplies on hand and not distributed. Appropriations for domestic activities total \$16,700,000. The largest item of this "home" budget is \$7,800,000 for civilian relief work, \$5,900,000 of which is to be held in reserve for carrying out of actual relief. For assistance to soldiers, sailors and marines in hospitals and in camps this year \$1,900,000 has been set aside. For improvement of health and prevention of disease throughout the United States during the current twelve months \$4,200,000 has been appropriated, and \$1,000,000 has been set aside for developing the peace time program of the Red Cross by service to its chapters in all regions. The remaining \$1,800,000 will go for administration expenses as against \$2,300,000 so spent last year.

The Fourth Roll Call is not a campaign. It is merely the yearly opportunity for American men and women to pay their annual dues and renew their membership in their Red Cross, that the obligation of the Red Cross to America and to suffering humanity may be discharged.

Do your part to enable the American Red Cross to fulfill its obligations, undertaken at the will of the American people. Renew your membership promptly during the Red Cross Roll Call, November 11-25.

Erysipelas.—

Muriate of ammonia-----	1 ounce
Tr. lobelia fol-----	1/2 ounce
Aquae dest. -----	q. s. 8 ounces

Mix and apply locally 3 or 4 times a day.

This formula has never failed me in 30 years' practice, and is much superior to the old mode of painting with iodine.—Ed. "Medical Brief."

The ass is noted for his braying, the mule for his kicking. Don't ape either.

The old family doctor's time had come. He realized that he must himself die, as he had seen so many other die. His friends had grasped his hand with affection as they left; his wife and children were watching his every breath. He was not afraid; he simply realized that the time had come, and wondered whether his acts, when weighed in the scale, would entitle him to heaven. He had been an average man, and had lived the average life. Now he was tired—so tired—and he hoped that behind the great veil of eternity which was even now drawing aside to receive him he would find rest. The faces around him grew dim, and he died.

He heard faintly murmuring voices. He had reached the Great Beyond, but was not fully conscious of his new surroundings until one voice grew more distinct. It was querulous and complaining; and then words came. "Doctor, can't you give me something to pick me up? I haven't got time to go away, or take a rest. If you could just give me a tonic of some kind, I am sure I would do my work all right."

"Oh, pshaw!" exclaimed family doctor, "I had so hoped I would go to heaven."

Goats' Milk and Rose Leaves for Ice Cream.

Ice cream made of goats' milk and flavored with rose leaves is the delicacy par excellence of Greece and Crete, according to an American Red Cross worker recently returned from abroad. To Americans, whose palates are attuned to the rich, creamy product of the Jersey cow, the goats' milk ice cream doesn't sound very delectable. But flavored with rose leaves, it is really delicious, 'tis said. If such epicurean delight can be compounded from the milk of the goat, why not try adding fresh rose leaves to the American brand of ice cream? It might prove as popular as "Caramel Sundae" or "Banana Surprise."

Goats' milk is whiter than cows' milk and ice cream frozen from it has almost the blue tinge of skimmed milk, unless colored by the petals of the rose. Its flavor is peculiar, but to the citizens of Mitylene it has no peer.

It is better to have done one's best and lost than to have done one's worst and won.

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The next annual meeting of the Tri State Medical Association will be held in Spartanburg, S. C., Feb. 16-17, 1921.

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Winston-Salem; Dr. Kendrick, Elizabeth City; Dr. B. C. Nalle, Charlotte.
To South Carolina Medical Society—Dr. D. A. Stanton, High Point; Dr. W. A. Monroe, Sanford; Dr. W. R. McCain, Waxhaw.

Committees Elected.

Scientific Work—Dr. E. J. Wood, Wilmington; Dr. Richard N. Duffy, New Bern; Dr. C. A. Shore, Raleigh.
Publication—Dr. P. B. McCain, Sanatorium; Dr. C. A. Julian, Thomasville; Dr. W. L. Dunn, Asheville.
Obituaries—(Continued) Dr. Arch. Cheatham, Durham; Dr. E. G. Moore, Elm City; Dr. F. R. Harris, Henderson; Dr. N. D. Bitting, Durham; Dr. B. O. Edwards, Asheville.
Public Policy and Legislation—Dr. H. A. Royster, Raleigh; Dr. L. B. McBrayer, Sanatorium; Dr. Cyrus Thompson, Jacksonville.
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The next annual meeting of the North Carolina Medical Society will be held in Pinehurst, April, 1921.

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Original Communications



THE ROLE OF HEART MASSAGE IN SURGERY WITH REFERENCE TO CASE RESUSCITATED BY A NEW TECHNIQUE.*

By T. C. Bost, M. D., Charlotte, N. C.

The expression, heart massage, in its surgical meaning implies the manual stroking, rubbing, or kneading of the organ and has for its object the re-establishment of cardiac action which has failed, as during the progress of a surgical operation or while a patient is under the influence of a general anesthetic.

A word as to the physiology of the heart might not here be out of place, and in this connection the question might naturally arise, why does the heart stop? It is equally pertinent to ask: Why does the heart beat? The prevailing opinion leans toward the myogenic theory, which holds contractility to be an inherent function of cardiac muscle and the one fact that stands out pre-eminently is that the greatest rhythmic power resides in the basal portion of the heart, that is, in what corresponds in the more primitive hearts to the sinus venosus.

As quoted from Keen's Surgery, (1) massage acts on the heart by: (1) emptying mechanically the distended cardiac chambers; (2) creating an artificial circulation; (3) keeping up the nutrition of the myocardium through the coronary vessels; (4) artificially pumping blood to the brain; (5) stimulating the reserve energy of the cardiac muscle.

Massage as a practical means of treatment in cases of failure of the pulse and respiration, especially those occurring during general anesthesia, is based not only upon a series of physiologic experiments, but upon clinical evidence as well.

The experiments began with the work of Schiff (2) in 1874. He showed by chloroforming a number of dogs until the heart ceased to beat that artificial respiration and stimulation by electricity were of no avail, but that massage directly applied restored cardiac action after an interval of eleven and one-half minutes.

Tuffier and Hallion (3) in 1898 communicated a similar series confirming this work.

In 1900 Prus (4) published the results of experiments performed by him on 100 dogs, killed by electricity, by suffocation and by administration of chloroform. Heart massage and artificial respiration were started in periods varying from 55 seconds to one hour. Of those in which the heart was arrested by electricity, massage was successful in 14 per cent; while in the others, over 75 per cent were resuscitated. Prus concludes that life can be induced to return even after the heart has ceased to beat for one hour.

White (5) in 1909 was unable to restore either respiration or circulation by artificial respiration alone, even by inflating the lungs with a bellows after the heart had ceased. The work of Crile (6), Dolley, and others, pointed out the fact that artificial respiration and cardiac massage should be carried out simultaneously. The first report of massage of the human heart was made

*Read before Tri-State Medical Society, Charlotte, N. C., February, 1920.

in 1898 and the first successful case was as late as 1902 by Starling (7) and Lane, so that as a therapeutic measure heart massage may be considered of fairly recent application.

Green (8) reviewed the literature in 1906 and gave an abstract of 40 published cases. White (5) collected an additional ten in 1909, making a total of 50 cases.

I have searched the literature very carefully and have collected 19 more cases, making a total of 69, including the case here cited.

The methods employed have undergone considerable evolution.

(1) The Thoracic route consists of cutting a flap of the thoracic wall over the cardiac area and turning it back. This procedure is necessarily forcible and must accentuate shock as many intercostal vessels and nerves are involved. Pneumothorax, too, has occurred in several of the published cases, and it is not surprising that the method has been abandoned except in operations on the heart and lungs, in which a breach in the thoracic wall has already been made.

(2) The abdominal subdiaphragmatic route. A median epigastric incision is made and the right hand introduced below the diaphragm and the left placed over the cardiac area. This method has been most generally used as it was a most natural thought when the heart action was arrested during the progress of a laparotomy, and when promptly done the conditions were favorable for resuscitation. It is the facility and the promptitude that secure success. It has been demonstrated, in a child, whose thorax is small and tissues elastic that subdiaphragmatic compression of the heart is possible though difficult; but in the adult it would rarely be effective, as only the apex can be reached making it impossible to empty the distended cardiac chambers or to massage the base of the heart where the greatest rhythmic power resides. Thus the need for the trans-diaphragmatic method to reach the base.

(3) The abdominal trans-diaphragmatic route. In this method a median epigastric incision is made and the diaphragm is incised approximately antero-posteriorly splitting the muscle fibre and gaining direct access to the peri-

cardium. Contractions of the heart have been thus produced in practically all the cases however late applied, as for example Green's (8) case, in which an hour after apparent death he incised the diaphragm and was able to produce a few contraction. While this method affords direct cardiac massage and is superior to the thoracic, yet it is objectionable in that it is a very difficult procedure. The stomach and left lobe of the liver handicap the incising of the diaphragm. There is also some risk of injuring the musculo-phrenic artery and causing concealed hemorrhage. Suturing of the opening in the pericardium and diaphragm is as difficult as it is necessary. Hence the advantage of the author's technique as worked out on a cadaver and applied in a case.

(4) Author's Method. The abdominal incision should extend well up to the ensiform cartilage. The left costal cartilages are well retracted, bringing the anterior diaphragmatic insertion well into view. A two-inch incision beginning one inch to the left of the median line, carried outwards behind the costal margin, cuts the fibers of the diaphragm near their insertion. The opening is rapidly dilated with two or three fingers of the right hand, so that the whole hand can be passed into the thoracic cavity, and the base of the heart effectively massaged. No vessels are injured in this incision, as the superior epigastric artery is to the inner side and the musculophrenic branch enters the diaphragm deeper than the incision. The liver and stomach, even if prominent, offer no obstruction to this route; nor is the pericardium in risk of being opened. During the massage the parts fit snugly around the wrist of the operator so that air is not sucked in, and there is no tendency to collapse of the lung.

The incision is easily closed and made air-tight.

I shall not go into the detailed history of the case, as this was reported at some length in the *London Lancet*. (9) The case was one referred to me, at the latter part of my two years' surgical service at the War Hospital, Dartford, England.

Pvt. "B" had infected wounds both knee joints of several months' duration. Suddenly developed acute abdominal symptoms and was referred to me for

an exploratory laparotomy. Chloroform was administered by an experienced anesthetist and just as incision was about to be made, respiration and pulse suddenly ceased. Pupils were dilated and insensitive; color changed to waxy and the case appearing hopeless from the outset. The ordinary methods of resuscitation were carried out, including artificial respiration, compression of the chest, tongue traction, head of table lowered, hypodermics of stimulants. After a lapse of ten minutes I made an epigastric incision and was able to palpate the apex of the heart which was motionless. Subdiaphragmatic massage was done for ten minutes with no response. The diaphragm was then incised as above described and the heart grasped with right hand and rhythmic compression was begun. The heart was flaccid, but regained tone as the massage was continued. After about ten or twelve gentle squeezes a sort of muscular twitch was felt and then the heart began to beat slowly, very feebly at first, but in a few seconds a radial pulse was felt after cardiac action had been suspended for twenty-five minutes. The diaphragm was closed and a rapid exploration of the abdomen made, which was negative except for an inflammatory exudate and possible enlargement of both kidneys and a general visceral congestion. Spontaneous respiration began after being suspended for forty-five minutes. The patient reacted to a semicomatose condition. The blood pressure returned to within 5 m.m. of the pre-operative systolic height. Very little urine was secreted. Notwithstanding a very careful and active post-operative treatment the case grew more septic and died 77 hours after operation. Gross post mortem was done. The incision in the diaphragm was air tight; heart apparently normal; septic metastatic foci in base of both lungs and throughout abdominal viscera most marked in the kidney.

The general septic condition of the case was such that recovery was impossible, even in the event the kidneys had been made to function.

Of the sixty-nine cases reported sixteen or 23.1 per cent were successful; seventeen cases or 24.6 per cent were partially successful in that the heart and respiration were revived but the patients died in from one-half to twenty

hours, death in several instances being due to a toxemia. Nevertheless they have been put in the group of partial successes; 36 cases or 52.1 per cent were failures.

From these figures we can rightly conclude that the results in the main have been favorable in that more than one-fifth of the cases have been saved, and nearly half of the total number have been resuscitated in a measure. The question now arises, how can we adjust heart massage in proper accord with its surgical bearings and save more of these cases.

In studying the reports the successful cases have been most naturally those that were subjected to massage early in the syncope. How long one is justified in waiting while carrying out the ordinary means of resuscitation, before resorting to massage, may be judged in a measure from the fact that there have been but two or three recoveries when the syncope has lasted more than ten minutes, and the largest measure of success has been when the interval did not exceed five minutes. Mollison's (10) case made a good recovery after an interval of thirteen minutes. He and others have pointed out that the anemia of the brain after a questionable interval produces irreparable damage to the delicate brain cells.

Norbury (11) has recently advocated massage after giving other methods a trial of only two minutes, and concludes that the fact that artificial respiration can be of no use in the absence of circulation, is often overlooked.

It would be very difficult to lay down a definite time limit, as this should probably vary with individual cases, but I am of the opinion that massage should rarely be done under three or four minutes (unless the abdomen be already open), though a much longer interval need not bar the operation. When the operation is decided upon the subdiaphragmatic method should be first done, it being the simplest; but in obstinate cases, especially in adults, where satisfactory compression of the heart below the diaphragm is impossible, this method should be dispensed with in two or three minutes in favor of the transdiaphragmatic method.

Another point of interest in this connection is the relatively small number of cases that have had the advantage

of heart massage, as compared with the number that probably goes into the thousand of so-called, "died on the table" or "anesthetic deaths." Nearly every surgeon of broad experience has been confronted with this condition and I might add almost every interne or resident physician has seen these cases that "went bad under the anesthetic," were given prolonged artificial respiration, pulmotors employed in many cases, and stimulation of various kinds carried out for a variable length of time, yet they failed to re-establish the circulation and the case was eventually taken to the morgue.

Conclusions.

1. Heart massage is an established method of resuscitation, which, properly employed, will serve as a final trump card for reviving many who would perish without its use. The case cited illustrates its unique value—in this instance after twenty-five minutes of asystole.

2. When the heart has once stopped for a definite appreciable time, it is very doubtful whether artificial respiration has any influence upon it.

3. The possibility of resuscitation bears a definite relation to the time that elapses between the cessation of the heart beat and the massage, and the shorter the interval the more certain is the response.

4. The length of the interval, during which the ordinary methods of resuscitation are employed, should probably vary with individual cases, but should rarely be done under three or four minutes (unless the abdomen be already open), though a much longer interval need not bar the operation.

5. Subdiaphragmatic massage may suffice, especially in children and if promptly undertaken, but if only the apex is reached and the heart remains unresponsive after two or three minutes, it should be dispensed with in favor of the transdiaphragmatic method.

6. No surgeon, even if relatively unskilled, should be content to abandon a case without giving his patient the benefit of direct cardiac massage.

7. This new technique offers a simple method of approach and is believed to be a decided improvement upon all other methods of doing direct heart massage, as it enables the operator to

grasp the heart firmly, involves less risk of haemorrhage, trauma, lung collapse and shock, and the incision can be more quickly and satisfactorily closed.

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11. Norbury. *Lancet*, London, Oct. 4, 1919, 2 No., 5014.

APPENDECTOMY.

(With the special permission of Dr. Long, we are glad to publish a personal letter he has written to Dr. Ransohoff, recounting some interesting bits of the history of the evolution of the present appendectomy operation. Sidelights on the story of the development of medical science are always interesting. When a puzzle is once worked it looks so very plain and simple we often wonder we could ever have been so stupid as not to have understood it.

An uncomplicated appendectomy is of so every-day occurrence we sometimes forget it was once a quite formidable procedure for the relief of most distressingly fatal pathology.

History proves to us that there were men, who, in what we are pleased to call the dark ages of medicine, were so egotistical as to say that the science of medicine has reached perfection.

May it not be worth while "Lest we forget" to repeat "There are as many fish in the sea as have ever been caught." Would it not be wholesome to recall that there are many problems concerning the alleviation of man's ills that have not as yet been solved.

Dr. Long's letter is not only very interesting but it as well may give us "food for thought."—Editor.)

Nov. 22, 1920.

Dr. Joseph Ransohoff,
Livingston Building,
Cincinnati, Ohio.

Dear Dr. Ransohoff:

The arrival of the preliminary program of our Southern Surgical Association recalls the letter you so considerably wrote me December 20, 1919, relative to your first article on the appendix. I purposed looking up the references and writing you at once but a multitude of cares kept creeping in the way and that old slothful monster "procrastination" got the better of me. But I can not face you at Hot Springs without having shown my appreciation of your courtesy, so here goes.

I am sure you have Kelly's book on the Vermiform Appendix and its Diseases. He goes into the history of the appendix with characteristic thoroughness. I may add that a large part of my knowledge of the early history of this subject comes from this source. However, having graduated in 1883 I am somewhat personally cognizant of the developments during the period of the Parker - Hall - Woodbury-Morton-Sands-Fitz epoch making work. Dr. Woodbury's son, now Col. M. C., U. S. A., is a special friend of mine and from him I have heard the story of the Woodbury-Morton case, I know Dr. Simon Baruch, by the way, a brother of Barney Baruch, and young Whitowsky on whom Sands operated. Baruch diagnosed the case and Sands did the operation. I also saw Hall and McBurney operate in their early days of this work.

My own first paper on "Appendicitis with the Report of Five Operations" was read and published in 1893; which was at least near the pioneer days, was it not?

Mestivier in 1759 incised a fluctuating abscess in the right iliac fossa evacuated a pint of pus and at autopsy found a pin in the appendix. Following Mestivier's operation incision and drainage for abscess in the right iliac fossa was practiced by leading surgeons, including Duputren. But no one thought of operating before fluctuation developed till Hancock, an English surgeon, in 1848,

advised and did a successful operation before fluctuation took place. Twenty years later, 1867, Willard Park, being convinced that it was not necessary to wait for fluctuation, placed the operation of incision and drainage on a firm basis. He reported four cases, one dating back to 1847, one of which was operated upon before fluctuation took place.

Then came the period when the appendix was removed. Rufus J. Hall, New York, was the first man to remove the appendix in the United States, May, 1886. He diagnosed strangulated hernia and found a perforated appendix and much pus in the abdomen. He removed the appendix, drained and the patient recovered. Hall claims this was the first case on record in the world in which peritonitis was due to a perforation of the appendix and the appendix removed and that the patient recovered. Kelly supports his claim.

It appears that two years before Hall's operation, Kronlein of Germany, in 1884, following the teachings of Milulicz, operated with the alternative diagnosis of perforative appendix or acute occlusion of the intestine. It proved to be the appendix which was removed. But his patient died.

An Englishman, named Symonds, in 1885, did the first interval operation. But strange to say he did not remove the appendix or even open the peritoneal cavity, going instead extra-peritoneally, he split the appendix and took out a concretion.

Dr. Frank Woodbury, of Philadelphia, made a diagnosis of probable perityphlitis and by his advice Dr. Thomas G. Morton operated April 27, 1887, removing a perforated appendix. The patient recovered. This would appear to be the first case on record in which the correct diagnosis was made, although as an alternative, the appendix was removed and the patient recovered.

Sir Frederic Treves published in 1888 that in 1886 he operated on a case of relapsing typhlitis "deliberately seeking for and removing the appendix." He found the appendix "corrected the distortion" but did not remove the appendix.

December 30, 1887, Henry B. Sands made a definite diagnosis of acute septic peritonitis due to perforative appendix in a patient seen with Dr. Simon Ba-

such. Sands operated at once, found the perforation, trimmed the edges and sutured up the perforation without removing the appendix. I knew this patient, at that time a lad, and have seen the scar. He is still living.

It was in 1886 that Fitz clarified the subject by discarding typhlitis and perityphlitis and showing clearly the relations of the primary affection of the appendix to the sequels which so long obscured the real *causus belli*.

I was much interested in your paper published in the Journal of the American Medical Association July 14, 1888. I shall always regret that you did not publish that appendectomy which you say was "in the early part of 1887." Your operation may have antedated Morton's on April 19, 1887.

"In reviewing the history of appendectomy I wrote to Dr. H. A. Kelly asking if, since the publication of his book, it had been discovered that any one else, other than those mentioned therein, deserved priority in this work. His reply just received says "John B. Murphy in a review of the book brought out one man who he thought deserved credit." He also adds "Give especial credit to Willard Parker and Sands and Morton of Philadelphia. He (Morton) did the first operation with a clear but alternative diagnosis. He had the case with Dr. Frank Woodbury."

I must stay my pen, fearing I may grow prolix and tiresome, but the subject is absorbingly interesting, and I thank you for calling my attention to it again.

Trusting that I may see you at Hot Springs, I beg to remain,

Sincerely yours,
(Signed) J. W. LONG.

Since writing the above letter I noticed an article in the October, 1920, issue of the British Journal of Surgery on the "Causation of Appendicitis," by Rendle Short, Bristol, England, in which he confirms practically all of the facts which I have cited in the history of appendicitis.

Don't let the depression depress you or you are done for.

Make good or get out of the way for some one else.

BRONCHOSCOPY—REPORT OF CASES.*

C. N. Peeler, M. D., Charlotte, N. C.

About one hundred years ago attempts were made to examine the esophagus endoscopically. These were not successful, and it was not until 1896 that the trachea was examined by a straight tube. The next year Gustav Killian, the Father of Bronchoscopy, succeeded in removing a foreign body from a bronchus. To him is due the credit of the direct examination of the air passages. In 1902 Einhorn devised an instrument for examination of the esophagus.

In 1905 Jackson, of Pittsburg, perfected an instrument for the purpose of examining the trachea and bronchi in which he embodied the straight tube of Killian, together with the light carrier devised by Einhorn. With slight changes it is this instrument Dr. Jackson uses today.

Within the past ten years the direct examination of the esophagus and air passages has made great progress in America and other countries, and today many laryngologists are using these tubes with success. In using the term Bronchoscopy, I mean to include the inspection of the Larynx, Trachea and Bronchi. Esophagoscopy, the inspection of the esophagus.

Direct Bronchoscopy is divided into three classes, upper, lower and suspension. Upper is subdivided into the high and low examination. By upper Bronchoscopy is meant the inspection of larynx, trachea and bronchi through a tube inserted by way of the natural passages, i. e., the patient's head is so placed that the passages from the mouth to bronchi are placed in line admitting a straight tube of certain caliber. If the head rests on the table, it is classified high Bronchoscopy. If the head is drawn over the table, it is called low Bronchoscopy. By lower Bronchoscopy is meant an inspection carried on through tubes inserted into a tracheotomy wound. Suspension Laryngoscopy is accomplished by means of an apparatus consisting of a special mouth

*Read before the Seventh District (N. C.) Medical Society, Lincolnton, N. C., October 5, 1920.

gag and tongue spatulas with an over head arm by means of which the head is suspended in such a manner that the natural passages are placed in a straight line. Then the bronchoscope or esophagoscope may be introduced for inspection of lower passages.

Lynch, of New Orleans, deserves special mention because of the work he has accomplished and also the instruments he has devised for use in suspension Laryngoscopy.

Chevalier Jackson has been the pathfinder for direct Bronchoscopy in America. He is a mechanical genius and his instruments reflect great credit to him in this respect.

The instruments used at the present time may be divided into two classes, according to whether the light is reflected from a source without the tube, or whether it is carried by means of light carriers to the end of the tube. As a type of the former may be taken the tubes devised by Killian. Of the tubes in which a light is carried to the distal end by means of a light carrier, Jackson's are the most perfect.

Case—B. T., female, three years of age. Parents said child had inhaled a watermelon seed while eating a piece of melon. Had fits of coughing with difficult breathing. Patient showed no symptoms at time of entering hospital, however, the child was anesthetised, larynx, trachea, and both bronchi inspected, no seed was seen. Patient kept in hospital for four days to watch for symptoms in chest.—Neg.

Case—E. C., male, two and one-half years of age. Had swallowed a penny three months before. X-ray showed penny on level with second dorsal vertebra. Dr. R. Hall Johnson and myself worked for about one hour to remove the coin, but were unable to do so. There was so much swelling, ulceration, blood and secretions, which made the work difficult. A mixture of Pepsin Bismuth Compound was given and advised father to return with child in two weeks. On the eleventh day child ate solid food. On return X-ray of chest.—Neg.

Case—J. F., male, aged five years. Four days before admission to hospital swallowed a wheat beard—had great difficulty in breathing especially when sleeping. Pharyngoscope revealed great edema Epiglottis and arytenoids. Tracheotomy performed and tube worn eight days. Dismissed on 10th day.

Case—E. M., male, age three. One week before had swallowed a small metal rake. X-ray showed this in the upper part of the esophagus—removed.

Case—M. C., male, age two and one-half years. History of having swallowed a coin 24 hours previous. X-ray revealed location and penny was removed from the esophagus.

Case—Baby C., aged eight months. Safety pin having been lodged in throat four days previous to admission on Monday night. X-rayed and pin removed from esophagus on Tuesday morning without difficulty. Patient was kept in hospital four days on account of shock. Dismissed 5th day after admission.

In conclusion I will give a part of Dr. Jackson's summary at the World's Medical Congress in London.

1. Direct laryngoscopy for diagnosis should be done by every larynologist, but for the best results, bronchoscopy, esophagoscopy and gastroscopy should be done by a few men to whom all cases should be referred in order that the highest perfection in armamentarium, organization and personal skill may be attained.

2. Eliminating the deaths due to lack of promptness in performing bronchoscopy, the mortality of bronchoscopy in the hands of various operators is about 3.5 per cent.

3. Localization by means of X-ray is of paramount importance.

4. Exophagoscopy for diagnosis in skilled hands has practically had no mortality. For removal of foreign bodies it has a mortality of less than three per cent. And this mortality is due to trauma incident to the foreign bodies and their extraction.

5. Lower Bronchoscopy is very rarely, if ever, necessary unless the endoscopist is unaccustomed to very small tubes.

Tracheotomy may be required for dyspepsia, but in such cases it is better to do the bronchoscopy through the mouth.

In selected cases suspension Laryngoscopy is better than direct Laryngoscopy in that the operator has both hands free while in the direct method only one hand is free.

APPLICATION OF THE X-RAY AS AN AID IN GENERAL DIAG- NOSIS.*

J. K. Pepper, M. D., Winston-Salem, N. C.

There seems to prevail among the laity and some physicians, an impression that almost any diagnostic difficulty may be overcome and almost any disease process may be revealed by X-ray examination. Especially is this so with those afflicted with some one or more of the many disorders, real or imaginary, whose origin is obscure and whose symptomatology is so complex, that the orientation of which into a tangible, working diagnosis will, at times, tax to the utmost the resources and ingenuity of the cleverest clinician.

It is in just such cases, however, that the application of this most valuable diagnostic agent, discovered accidentally; primarily surgical in its ability to reveal foreign bodies, bone fractures and the like, but which in later years has become of such valuable assistance to both surgeon and internist in their physiological and pathological studies of the various organs in their functioning, is of unquestionable importance as an aid, and I want early to impress the fact that it is only an aid and is never to be relied upon to the exclusion of carefully formed clinical conclusions, in the clearing up of some doubtful point by its positive or negative findings that may confirm or deny a preformed conclusion or by some new revelations, start another line of investigation that will lead finally to a correct diagnosis.

Particularly is this so in the obscure cases encountered by every worker in the various fields of medicine and surgery. The oculist will not be satisfied with the mere fact that there is present a foreign body of minute proportion imbedded in the eye he must have an exact localization of this offending particle that it may be removed with the least trauma to the delicate structure of this organ which may determine the future status of its function as to whether it is conserved, impaired or entirely lost. The Otologist will encounter obscure mastoid cases; and the Rhinologist, even though he may have become rather expert with trans-

illumination of the superficial sinuses, will often require roentgenological assistance in his diagnosis of the various sinus affections. The Urologist needs conclusive evidence of the presence of a stone in the kidney or renal pelvis; or in the ureter with its resultant hydro-nephrosis; ureteral kinks and strictures; bladder stones and diverticulæ. And even the Obstetrician and Gynaecologist will occasionally call upon us to differentiate a tumor mass in the lower abdomen from a normal pregnancy. The Orthopedist has frequent recourse to the X-ray laboratory, recognizing, as he must, one of his greatest diagnostic assets in a direct recognition of departures from the normal in his studies of bone and joint affections. And especially will the chest specialist require the aid of a roentgen examination in outlining with definiteness an hydro-pericardium; in the detection of a beginning aneurysm; and in the checking up of his clinical findings relative to the location and degree of sacculation of a self-evident aortic dilatation. An orthodiagram will also be found useful in its true record of the actual size of a heart that is dilated or hypertrophied in some one or all of its normal dimensions. Careful examination of the lungs quite frequently demands a radioscopic or radiographic examination to complete a diagnosis, especially so in those cases of very early tuberculosis, when a positive diagnosis is quite positively suspected but stethoscopic and percussion sounds are absent. Or, it may be that, all clinical findings are positive and the roentgen report is desired only for corroboration and to note the extent of lung invasion, that the degree of advancement of the disease process may be estimated. Bronchitis, acute and chronic; Bronchiectasis; the pneumonias; Pneumothorax; Lung Abscess; Malignancy, and Pleurisy with serious or purulent effusion may all be diagnosed by this means and the findings in each instance are quite characteristic, especially so when indicated by a carefully obtained clinical history. Here it is possible that by a careful fluoroscopic study of the diaphragm during the onset and early course of an acute pleuritis, a most spectacular diagnosis may be made, viz: the prediction of the subsequent occurrence of a pleural effusion prior to the appearance of fluid in the pleural cavity.

*Read before the Forsyth County (N. C.) Medical Society November 9, 1920.

Virtually all the instances that I have mentioned in which the roentgen ray may be used to very great advantage in diagnosis, will be of signal aid to the general surgeon and internist as well, who will demand these and more, for much of their diagnostic work is in common and is concerned with the more intricate diagnosis of the various intra-abdominal affections, and, I might say that it is here that, in his effort to aid in clearing up some important point in the diagnosis, the roentgenologist will most often meet with his Waterloo, for particularly here he has nothing tangible upon which to base his findings; he is dealing exclusively with shadows that have been proven to be present in similar cases that have come to operation or autopsy, and he must be in position to interpret these shadows in their proper relationship to the present manifestation of disease processes in their almost daily occurrence. I speak particularly of those intra-abdominal cases in which a combined medical and surgical diagnosis is involved, and in which surgeon and internist are mutually interested. Types of which cases are Gastric and Duodenal Ulcer; Gastric Cancer in its various stages; Gall Stones and gall bladder disease; Renal and Pancreatic affections; Appendicitis acute and chronic; Intestinal Obstruction; Diverticulitis, and Intra-abdominal adhesions.

The methods employed and results obtained in a radiological examination, especially of the abdominal and thoracic viscera, are quite impressive to the patient and frequently to the physician as well, but the many, and often very great, difficulties that may be encountered and limitations imposed are rarely, if ever, appreciated by either. In our failures, and they are many, the one will be disappointed while the other is usually critical and often severely uncharitable in his censure. These difficulties have long been recognized by roentgenologists, and no less authority than Baetjer of Johns Hopkins Hospital, is forced to the confession that "in spite of our most thorough means of investigation, including the use of the latest and most accurate methods, the diagnosis of many of these problems often remains obscure, and indeed at times impossible."

However, the roentgen ray has shed new light upon many of these intricate

diagnostic problems. And from what has already been accomplished, in lieu of the fact that we are at times obliged to concede very material limitations to the conclusions that may have been drawn, the results of which are sometimes misleading, it seems quite possible that, as our roentgenologist technic and methods of interpretation of plates and fleuroscopic findings are perfected, the solution of many of these important questions will have been accomplished and roentgenology will take its proper place as the most potent single aid in differentiating many of the perplexing problems that constantly arise in medical and surgical diagnosis.

Even in its present imperfect application the importance of this form of examination is quite generally recognized. By this process new and materially different evidence is obtained which, added to that furnished by other methods, will, in great measure, increase the clinicians diagnostic resources.

Formerly percussion, palpation and auscultation played the important role, and are still indispensably important, in physical diagnosis. Visual inspection—used only in a general way in conjunction with the other three, has by means of the X-ray, taken on an added value so that now the physician need no longer be blind but may use his eyes as well as his fingers and ears in perfecting his practice, since by means of the fleuroscopic screen he is easily enabled to observe in their outline and functioning, the more obscure, deep seated organs which hitherto have been hidden.

The superiority of this method will at once present itself to you when you remember that information obtained by the ordinary methods of physical examination applies only to those disease processes that are sufficiently superficial to be manifest to the sense of touch or by means of perceptible sound, transmitted to the ear, while the eye can easily visualize concealed lesions of deeper tissues, affording us in a way, the advantage of what Claud Bernard has aptly termed "a living autopsy."

If this relatively new diagnostic method, of proven value, is to be utilized advantageously, the question naturally arises as to who shall employ it most beneficially and how may the best results be obtained by its application as an aid in general diagnosis.

Even though by means of plates and the fleuroscope, we are enabled to make visual examination of certain organs, lesions of which cannot be detected otherwise, it is not enough alone for us to see but what we see must be interpreted into conclusions useful for diagnosis. This is not easy. There is no rule of thumb that can be applied to interpretation—it is simply a study in black and white—the only available information appearing upon the screen or plate as lines and shadows, the recognition of whose forms, extent, location, and degree of density, as well as whose relation to the different organs and disease process of the part examined, demand that the interpreter par excellence, must have accurate anatomical, physiological and pathological knowledge, he must therefore be a physician; one who is well grounded in his conception of the development and progress of disease and the complications that may arise, for in less competent hands serious errors of interpretation will inevitably occur; half baked opinions will be offered that will hamper rather than aid the clinician; this important diagnostic aid will have more than failed in its function and useful medical work cannot be done.

There are times, however, that due to the fact that nothing of the nature of these lines and shadows, their anatomic value or development, is revealed, the information lacking to the most finished radiologist must be supplied by the physician, the patient, the family history or from the record of a complete physical examination. Obviously then, there should exist the closest co-operation between the physician and radiologist, to the end that the latter by being in possession of all the facts may render a wise and accurate interpretation, and together by thorough discussion of the clinical and radiological manifestations, decide which should have precedence, and why. After which detailed analysis a synthetical conclusion should be formed. In this way only can a correct diagnosis be made—for in this diagnosis consists.

In certain cases no such correlation of data will be necessary. A radiological examination alone may be necessary, in fact may be so conclusive as to completely change the superficial diagnosis. In other cases it will only be confirmatory, while in still others, when there

are probably many confusing factors, clinically, it will be found of the greatest aid in eliminating obstacles to satisfactory deductions, and satisfactory conclusions will the more readily follow. In any event, even the diagnosis is apparently so self evident that an X-ray examination may seem quite unnecessary, I believe that it should not be neglected, for it is just such cases that will furnish most interesting and unexpected aid to the physician in his summing up of his case and it is always for him to decide in the final analysis. And if it is essential that the radiologist be a physician—the physician should in turn, probably to a less degree, be a radiologist. Since he is to be the final arbiter, it is incumbent upon him to become interested in radiology; to familiarize himself with at least the elementary principles of interpretation of screen and plate images. He cannot examine the patient entirely in this manner but he can assist by furnishing to the radiologist facts that he may be unable to collect and by discussing with him the interpretation of his findings, thus lending to the accuracy of his final opinion.

Such then, are some of the ways in which the application of the X-ray may be of help to you in rounding out your diagnosis. And in conclusion, I want to say again that radiology has become a most useful adjunct to diagnosis which will increase in usefulness proportionate to the increase or collaboration between physicians and radiologist. I must insist, however, and it cannot be too often stressed, that final and complete diagnosis should not be demanded of the radiologist; except in certain self evident cases this is not within his province and is frequently quite impossible.

This method, comparatively new, is not a supernatural science and ought not to be regarded as such. It is only another method of examination, different from the others—perhaps more accurate—whose part it is to furnish some indication and interpretation for diagnosis.

In many and varied cases, involving questions of differential diagnosis, will it be found of especial value as an aid—and it must not be forgotten that it is only an aid, and that the final expression of opinion as a diagnosis rests wholly with the physician or surgeon in charge, as the case may be.

FIFTY-POUND CYSTIC TUMOR OF OVARY.

Dr. Eugene B. Glenn, Asheville, N. C.

Mr. President and Gentlemen:

Fifty years ago the case I am reporting today would not have been of unusual interest. But today, when there are so many energetic and persevering surgeons, it is a rare sight to see a tumor weighing fifty pounds and of nineteen years standing. In the second place, the patient will not tolerate an abdominal growth that long. The public confidence in the surgeon's ability and the convenience to the excellent hospitals existing in, or in close proximity to every community today, make growths of such size and duration very rare.

I asked this patient why she had not had this tumor removed long before this. She replied "My husband was afraid. I carried the tumor and he carried the fear."

This patient lives twenty miles from the nearest railroad. The country roads are rough and an attempted journey to a hospital for an operation was only undertaken when the neighbors and family became thoroughly convinced that something more radical than more tapping for dropsy had to be done.

Ovarian growths occur, as far as I know, at all ages and in all races. The more usual variety is cystic in character, either simple or dermoid. Much has been written as to the immunity of the negro to this type of tumor. Authentic records show that there are one-third as many deaths from ovarian tumors in the colored race as in the white. These statistics were taken from a city where the population showed one colored to four whites. Despite these statistics, ovarian growths are unquestionably less common in the negro, and the heavy mortality with them is explained by the fact that they are poorer surgical subjects, and, as a rule, have less skilled abdominal surgeons to attend them. Ovarian diseases of all kinds are relatively on the increase at the present time in the colored race.

Ovarian growths in both extremes of life are comparatively rare, though d'Archy Powers reports a case in the

Victoria Hospital, of an infant four months old from which he removed an ovarian cyst containing fifty-nine ounces of fluid.

Sir Spencer Wells, whose operative experience in the pioneer days of ovariectomy was extremely large, reports cases in children under ten years of age. As has been said, ovarian growths occur in the other extreme of life, cases having been reported at the ages of eighty, eighty-one, and eighty-two. Ovarian growths may attain enormous size. The largest cyst, to my knowledge, has been reported by Cartledge, of Louisville, which weighed 245 pounds.

Other enormous cysts have been reported by Keen, of Philadelphia, and others.



Exhibit A.—Abdomen prepared for Operation. Dark color due to iodine. The thigh shows position of patient, on the table.

The case I am reporting today is the largest one I have ever seen, and I doubt if I will ever see as large one again. For the reason that it is a large one in present day surgery, I beg your indulgence in submitting the following report:

Mrs. W., age 41, white, American, occupation housewife. Admitted to hospital July 24th, 1920. Condition on admission, fairly good.

Family history. Father died at age of 61, cause unknown.

*Read before the 6th District (N. C.) Medical Society, October 14th, 1920, at Asheville, N. C.

Mother living and well. Four brothers and four sisters living and well. Two brothers dead. One died from diphtheria, the other from croup. Has two children living and well, one child died at the age of six months, from bronchial pneumonia. No history of tuberculosis, syphilis, or any chronic diseases in family.

Personal history. She had good health until fourteen years of age, at which time she began menstruating. Since that time, she cannot say she has ever been well. Had all the diseases of childhood. Had diphtheria at the age of 15 years. No history of scarlet fever, typhoid fever, or malaria. Has always been subject to colds and bronchitis. Menstruates regularly, every 28 days, seven days duration, with a great deal of pain and very little flow. Appetite has always been good, bowels regular, no digestive disturbances, no history of any cardio-renal disturbances.

Present illness, began nineteen years ago, soon after the birth of her first child. She first noticed a soft mass in her right iliac fossa. This caused more pain during menstruation. The mass gradually increased in size and after two years it became so large and uncomfortable that her physician tapped the abdomen, obtaining two gallons of dark brown fluid. During this interval, she gave birth to her second child. Three years later, was tapped the second time, about the same amount of fluid being obtained. In the meantime, she had her third child. After the second tapping, the mass increased in size faster and it was necessary to tap more often to obtain relief. Altogether, she was tapped nine times. The pain gradually increased in severity just before, during, and just after menstruation. Had a great deal of backache, especially when on her feet. Had to stay in bed two to three weeks after each tapping, on account of weakness. With this exception, she has not been confined to bed and has done a moderate amount of housework since the onset.

Physical Findings. The abdomen was enormously distended, as shown in exhibit A. On palpation could be felt a large tumor mass filling the entire abdomen. There were areas of firm resistance over the mass, but more perceptible to the left of the umbilicus. There was no change of flatness on changing the position of the patient.

Vaginal examination revealed the fact that the uterus was rather larger than normal and markedly retroverted. The left broad ligament and side of vagina had a feeling of fullness which the right side did not have. I found that this condition was due to the size of the tumor. It was so thick at its pedicle surface that the tumor which developed from the right ovary could no longer remain in the pelvis, therefore pulled up the right broad ligament and side of vagina.

Kidney function 50 per cent. Urinary analysis:—Indican, three plus, trace of albumen, hyaline casts plus, no granular casts, small amount of sediment, reaction acid, specific gravity 1020.

Exhibit A shows patient on table, abdomen painted with iodine, ready for operation. Coagulose was given just before operation to lessen capillary oozing.



Exhibit B—A fibro-cystic tumor weighing fifty pounds. Clamp can be seen on pedicle. A fibroma on other surface, bottom posterior surface. Compare base and apex of tumor to waistline of nurse and instrument cabinet behind table, which will give you some idea of correct size.

The incision extended from just below the ensiform cartilage to the symphysis. Extensive paristol adhesions existed as a result of the numerous tapplings (9 in all) in the previous nineteen years.

The small intestines and stomach were well crowded up, high under the ribs. There was no room for them down in the lower abdomen. The uterus was crowded downward and backward in the pelvis. The pedicle of the tumor was thick and broad. The clamp can be seen on the pedicle in Exhibit B, which shows the tumor after its removal. The tumor as you see it, weighed a little more than fifty pounds. Some idea can be gotten of the size, by comparing the distance from where it is lying on the table to where the top of the tumor comes up on the nurse and the instrument case just behind.



Exhibit C—Shows difference in appearance of abdomen four weeks later. (Picture needed longer time exposure.)

The patient's pulse was 100 when the anaesthetic started and 95 when it ended. Respiration was 18 at beginning and 20 at the end. The tumor was slowly lifted from the cavity and the shock following was only slightly per-

ceptible. Very little nausea and vomiting followed operation. Patient remarked the next day that she felt great relief. She had no trouble with gas pains or abdominal distension.

The over-distended abdominal wall was taken care of by dissecting back the skin and overlapping the abdominal fascia.

Temperature never went above 100 and everything went well, took plenty of nourishment, called for corn bread and buttermilk, and would raise up on her elbow in bed when she thought no one saw her, in the second week.

At the end of the second week, she developed a phlebitis in left leg. There was pain and swelling, a rise of temperature to 102, pulse 108. This condition lasted about ten days. The swelling was almost all gone in the leg when she left the hospital, four weeks from the time she was operated.

Exhibit C shows the appearance of the abdomen the day she left the hospital, August 28th, 1920.

In a letter from her last week she says "I am feeling fine, can walk and work some. I cooked dinner and shelled a basket of beans today. I can do lots of things that are useful."

I wish to acknowledge the able assistance given by Dr. A. T. Hiops, who referred me this interesting case.

FAITH CURES AND HOW THEY ACT CONTRASTED WITH THE PRINCIPLES OF SCIENTIFIC HEALING WITH ILLUSTRATIVE CASES.

Tom A. Williams, M. D., C. M.,

Foreign Corresponding Member Society of
Neurology of Paris, Etc.

Neurologist to Epiphany Dispensary.

Freedman's Hospital, Etc.

Medical men, particularly as regards mental medicine, are at a disadvantage in meeting the wiles of charlatanry; for we cannot make our appeal so sensational as that of the mystery mongers. The hold which surgery has taken on the public mind is partly perhaps because of the very sensationalism of its appeal; and such recent medical agents as salvarsan and radium have gained much renown from the exaggerated emphasis given them by journalists. At the time when psychotherapy was

equivalent to hypnotism, similar exaggerated claims were made regarding it; still more recently the meritriciously presented observations and reflections about multiple personality had much vogue; and even now the schematised phantasies of some psychoanalysts have been exploited sensationally before the public. But the appeal of all these is to the love of the mysterious, an aid denied to the psychotherapy now presented.

This latter has no attraction for lovers of the marvellous; for it is merely an enlightened good sense without any mystery. Indeed in its apparent simplicity, it illustrates the attitude of the questioner who upon being told by the painter of a picture he admired, "One simply mixes the paints and puts them on with a brush," declared contemptuously, "Oh, is that all?" The illustration is an accurate one; for to play on the mind, which may seem so easy to the crude or unobservant because of the concealment of its art, requires much greater skill than the admittedly difficult art of playing the flute as Shakespeare so penetratingly made Hamlet remark.

That medical men are so obtuse regarding the need for technique in psychotherapy permits them to attempt the treatment of these difficult cases, a thing they would never attempt without special training where the eye or major orthopaedic surgery was concerned. The result is that the many patients not benefited cast discredit upon medicine and become a derelict herd upon which fatten the exponents of systems of incorrect thought, weird manipulations and semi-religious fanaticisms. It is high time that it be recognized that the graver neuroses are just as much in need of special skill as are obscure medical cases or those required in major surgery. In the same way, just as it is recognized that a man without special skill not only obstructs but is a dangerous assistant in the operating room or laboratory, so it must be recognized that the endeavors of a physician, however well-meaning or intelligent, unless he is specially trained, may seriously incommode the progress of his patient; for he can hardly help interfering with the special technique of the psychotherapist.

Two Common Errors.

Unsound psychotherapy by medical men commonly shows itself either in attempts at suggestion, which are often merely an evasive jollying, or in the relegating of a patient to a sanatorium for nervous disorders. These practices are most reprehensible; for in very few of such sanatoriums are there men with sufficient neurological training or insight concerning psychoneuroses; and to attempt any therapeutics without some etiological diagnosis is the haphazard with which we so often reproach charlatans.

What should we think of the physician who gave morphine for a pain in the abdomen, regardless of the possibility of acute inflammation requiring surgery? Yet there is no difference in principle between such reprehensible procedure and the common negligence which attempts to remove, by hypnotic or waking suggestion, symptoms concerning the genesis of which the operator is completely ignorant. It is time that medical men realized that only a very thorough neurological training can in many instances furnish the means for a diagnosis between organic and functional disease. (See author's "Diagnoses of functional from organic Motor Disabilities," *Archives of Diagnoses*, N. Y., 1908-9; and "The Sensibility in Disease," *Am. Jour. Med. Soc.*, 1910). And it is hardly known at all that functional nervous disease should never be diagnosed by exclusion, but by its genetic factors, or at least by a detection of its mechanism. To do this requires very special training.

The Sanitarium Fetisch.

A case illustrating the folly of sending a patient to an institution, as well as gross failure to detect the mechanism of a profound melancholic reaction, was that of a well educated man in the thirties whom I saw in England last August in St. Luke's Hospital for the Insane, where he was regarded as a dement. The patient had been certified as a hopeless lunatic, and had been incarcerated for some years, so that he was slowly perishing of inanition. He had within four years consulted several of the most distinguished London neurologists; and although none had made a diagnosis, all had regarded the case as hopeless. Although the man persist-

ently refused food and could not be kept clean and his dejection was so profound that it required immeasurable finesse to get on a rapport with him, twenty minutes served me to find out that his condition was purely psychogenetic. It was merely the result of intense depression caused through his failure to accomplish a most ambitious task in literary psychology, for which he was ill-fitted in training and intellect. An exaggerated slough of despond from discouragement would describe the mechanism in popular language. Thanks to the persistence of a faithful sister who had consulted me, proper measures were instituted in spite of the scepticism of others; and the New Year brought me word that the patient has shaken off his melancholia and is well.

Such a reproach to medicine is I fear not rare; and I am sorry to say that few sanatoriums afford much chance that the mechanism of a psychoneurosis would be detected and the patient placed on the sure road to recovery.

This is a term used in psychopathology to denote the train of ideas and emotions which through a series of associations have modified the psychic reactivity of the patient.

Other Cases.

I have already related before this society ten cases illustrating the rational therapy of hysteria (Wash. Med. Annals, Jan., 1912).

Some of these forcibly exemplify the failure of Imperial suggestions employed by other physicians. There should be recalled Dr. Hardin's young woman from Warrenton, where the most emphatic suggestions failed to influence an intolerable hyperaesthesia round the knees and arms cured in one week by exercise based upon a rational understanding of the mechanics of psychology of muscular contractions which caused the pains.

Some will recall Dr. Stone's case of illusion spasm which the removal of a diseased appendix failed to cure, but which was removed by two weeks of psycho-motor discipline.

It should not be necessary to again cite the striking success of rational psychotherapy in children, for the examples related last year (Wash. Med. Annals, 1913; Amer. Jour. Med. Sci., January; also Journal of Abnormal

Psychology), where a single interview often sufficed should be fresh in your minds. Nor should it be necessary to remind you that the psychotherapy of our day need not approach with diffidence the hitherto intractable occupational and traumatic "neuroses;" for principles were set forth so recently at the International Congress here, 1912, and the International Congress of Medicine, 1913. (See Transactions, also Monthly Cyclopaedia, 1912).

But I wish to supplement these cases by another case exemplifying the manner of treating hysteria in an older child, and of the more obstinate case of an older woman, and with two cases showing the perniciousness of unthinkingly referring to a sanitarium a patient in so grave a contingency as the persistent attempt to commit suicide.

Hysterical Night Terror.

A girl of 16 was referred by Dr. L. Lichfield, of Pittsburg, November, 1913, on account of "great nervousness for years." She had never been regularly to school until the Fall, when she had been sent to boarding school after convalescing from appendectomy, but had become so nervous that she had to return in two days. Inquiry showed that she would frequently wake in the night very much afraid unless she were soothed by someone sleeping with her; so that she could never sleep alone. Further inquiries showed that a servant had told terrifying stories to her sister as a child. The horrors this brought ran through a family of three children; but they passed away from them all except this patient. She had been much indulged between the ages of three and six, and had been somewhat spoiled since owing to a supposed weak heart, and had always been considered a weakly child. Her father and an aunt had been timorous as children; the latter for nine years had not dared to be alone for a moment.

Examination showed feeble reflexes, becoming active on reinforcement; muscle tone fair; weight 108 pounds; pulse 104 during examination, although patient said she was not excited. Cardiac sounds closed; chest expansion free. Appetite is said to be good, with certain dislikes; walking tires her, but dancing and tennis do not. For heterophoria she was prescribed glasses, but does not use them.

Psychic functions are unimpaired, except that on account of fear she just wants someone with her when in bed. Her fears are either of fires or burglars; and they only occur when in bed or asleep. She whines when dreaming, and wakes frightened but never screams, but clutches her companion desperately for reassurance. She is sure she wants to get rid of this trouble. She cannot remember the first occasion of fear. Noises, such as creaking of floors, make her think there is someone in the house; although she knows positively there is not, but cannot make herself believe it. She is ashamed of the emotion, and is terrified to go to bed alone if there is not someone else upstairs, in which case she will wait until her mother comes up. If made to go alone she imagines a burglar might hurt her.

Analysis shows that there is no definite fear of what he might do to her; but that the fear is of the unknown; and although it might help her to know it, it might be too terrible. Her agitation upon speaking of this she attributes to her shame of being "babyish." I explain there is no shame in what one cannot help; but that she cannot, until an understanding is gained through analyzing the situation. She is not less frightened when away from home, but any person in the room will tranquilize her fear upon wakening if she can touch them. The night fear is quite different from any fears in the daytime.

After the analysis she was asked to go home and write out her impressions of the situation, which she did as follows:

"The earliest instance I can remember was about eight years ago, when my nurse sat in the next room while I went to sleep. For five or six years afterward someone was with me when I was going to sleep. If I woke up in the middle of the night—which I usually did—I would be terrified and go into mother's bed, with her, in the next room. It is only within the last few months that she has been sleeping in the same room with me the entire night. Before that I always went to bed in the room next her's, but very rarely remained there all night. I can not ever remember having the nurse put me to bed and then leaving me to go to sleep by myself. She was always in the next room. It made very little difference whether my moth-

er, nurse or sister were with me. I preferred mother, but would have anyone rather than be alone. I was always worse in our city home than in our country home because I thought there would more likely be burglars in the city than way off in the country. I would go to sleep more quickly in the country but would always have someone with me.

"As long as I can remember I have dreaded night. I always awake a long time after going to bed fighting with my terror of burglars. Every sound made me think of them and I used to hold my ears shut so that I could not hear the floors creak and try to go to sleep that way. So when I thought of those long sleepless hours I would wish that there was no such thing as night."

Her dread is mingled with self-contempt at her "silly babyishness."

Three dreams were obtained. The first and second were of a burglar entering the window. The analysis showed only that the intruder aimed to shoot her sister who was standing up behind her; a dream of fears of elevators led to no pertinent associations.

As the dream analysis was so unfruitful, I believed it best to at once proceed to reconditioning of the psychological reactions. This was attempted in the first place by studying the child's power of understanding of what I gave her to read about the psychology of fear, and by making clear to her what she could not understand alone. In the second place, she was given exercises in mental concentration; and as she became more proficient in these was urged to apply them to the study of her own feelings of nocturnal apprehensions. The principle she was made to grasp was that fear and shame of her fears prevented her from facing and examining them, **which was the essential preliminary to the understanding which would make them disappear.**

In ten days she returned home not yet able to sleep alone, but beginning to obtain mastery. A month later her mother wrote me that she was entirely well; that when she wakened in the night she would quietly turn over and go to sleep without troubling anyone, and that she was physically and in mental health better than at any time in her life.

On reading this and other cases, I am dissatisfied by the baldness of its presentation. But where one is performing

the innumerable refinements of analytic and synthetic psychotherapy, it is impossible to turn round and write them down; and even if they could be written down, the length of the case would forbid its reading. It would be as if a surgeon in relating an operation were to write down each turning of wrist or bending of finger. Psychotherapy of the more refined sort is an art of which only the principles are practicably describable, for otherwise each case would require a book.

A woman, aged 28, whom I saw in February, 1911, with Dr. Hardin, to whom she was referred by Dr. Maphis, of Warrenton, Va., in the preceding June, had had a chill after which she cried. The next day she felt very weak, and the next day she had pain in the knees, she thinks only in the left, with hyperesthesia. There was also, she says, tenderness of the lumbar spine, and later on in the groin and hip. She was treated by massage, and for four months was relieved. About Christmas time these pains recurred when her sister visited her. There were then nausea and persistent dull pain in the knees, which caused her to groan in her sleep.

Examination was negative, except that there was great hyperesthesia of both knees and one arm. Also the right abdominal reflex was absent, and the abductor reflex was exaggerated on the same side. I decided that the case was psychogenic, and that afternoon attempted psychoanalysis to seek the origin of the psychalgia. I found two suggestive incidents, one being the visit of a sister on the second occasion, the other being the fact that when first attacked her brother had a severe hysteric spell. He had consumption, which she feared. Another fact perhaps significant was that she had been two weeks in a newspaper office during its change of ownership; alone with the man in charge much of the time.

As she could stay in Washington only a short time, I concluded that it would be better to remove the effects of whatever had been the source of the hysteric symptoms by psychomotor discipline than to try to pursue psychoanalysis which might be unfruitful in the short time at her disposal.

Method.

As the least approach toward the patient's knee would set up a spasm of terror during which abductors, hamstrings and extensors went into spasm. I began a course of gradual habituation, first to the approach of a person's hand toward the knee, later to manipulation of the patellar region, followed by pressure on it. A sister attended her in hospital and helped her to accomplish those exercises several times each day. In this way she taught herself in a few days to control the muscles around the knee-joints so as to prevent them contracting when her knee was touched. The pain ceased when the spasm did, as it was in part maintained by the latter. Then her alarm vanished, as there was no reason for it; and she was satisfied that her pain lay in her own power to control. The dangers of prepossession by a fear, in conjunction with the mental vacuity engendered by lack of occupation, were explained to show the genesis of false fixed ideas regarding disease, and she was told how to avoid them.

She returned to Virginia in a week well, and has remained so for nearly two years.

Even chronic pain in the abdomen may be psychological; in the case which follows, a spasm of the muscles, although it had begun as a reaction to an inflamed appendix, had remained as a psychological habit, which only psychotherapy could remove.

A boy from North Carolina was referred to me by Dr. T. S. Martin. The patient was suffering from what is called a "barking and bowing" tic. When he sat down he would utter a series of barks, and at the same time the trunk would double up. The attacks had begun suddenly three months before in the middle of the night after he had eaten sandwiches sent by his parents from Washington and had been thinking despondently about how nice it would be to be back there. He had also been thinking a good deal about his inside for which he had been much doctored. This patient had been treated by electricity, which he was assured and no doubt believed, would cure his trouble; then by direct suggestion, and finally by the powerful suggestion of the strongest medicine known, a drug obtained from some remote country and

guaranteed to cure. All these methods proved utter failures. Because there was not time, there was no attempt to delve completely into the mental life of the patient, but it was deemed sufficient to rectify the physical manifestation of his mental disorder, whatever its precise nature might have been. And note well this was done by physical means. There was no attempt (such as had been made by the previous suggestioners) to bludgeon in, by mental suggestion, a sort of panacea, a cure-all, like the belief of the Christian Scientists, and thus reverse the whole trend of his mentality without the least attempt to discover either what the matter was or how it arose. This patient was placed in a reclining chair. The muscles of the abdomen were pointed out and their activities explained to him, and he was taught how to voluntarily move them and by doing so counteract the spasms which were making his life unbearable. Two days' drill sufficed, and the patient was and still remains cured.

As to Suggestion—The man on the street, and as regards morbid psychology few medical men are yet in a better position, if he ever thinks about it at all, probably believe that suggestion, is either "claptrap and twaddle" or something marvelous and mystical, or like the old electric fluid of our fathers, almost like something you could put in a bottle and take before going to bed. Even physicians have been heard to speak of "giving a little suggestions." (Actually, suggestion is merely the process of getting an idea accepted by the mind of the subject by slipping it, as it were, past the guard of his attention or criticism). This may be done in various ways. For instance, it may be done indirectly when the subject's attention is lulled, as by a political harangue or theological evordium. It is not a desirable method of therapy generally speaking.

Ecclesiastical Suggestion—The faith-healing cults really act by suggesting the disappearance of inconveniences. Each of them of course may remove symptoms but only in cases where there is a false idea at the root of the trouble because each, if successful, removes the false idea.

The very distinct advantage, however, which one of these cults has over many other methods of suggestion, is

that its teachings are positive, though they appear negative. It not only removes a false idea but it fills up the void again with a positive beblief that all is well. This is obviously more efficacious than physician's methods which not only concentrate attention upon the physical aspect of the disorder but merely aim at the removal without substitution of the false idea. Suggestive power of healing cults is of course further tremendously strengthened by the religious aspect. The fault of these cults' procedures in their application to nervous disorders, even apart from the obvious danger of misapplication to physical disorders is that they substitute for the original distorted thinking or false idea, an equally false, unreasoning and treacherous optimism.

For example, suicide from the effects of a "Faith cure"—A prominent business man in one of the larger southern cities was attacked recently by the condition which precedes and leads to arterial sclerosis. A specialist ordered certain exercises and a dietary, but the real estate man adopted Christian Science. He believed himself to be cured, being possessed by the idea that "God is all: God is Good: All is Good." Hence his natural business caution was replaced by an unreasoning and happy-go-lucky optimism. Result, rash speculation, financial ruin and suicide in six months. Of course, there are many suicides of persons who have not embraced faith healing cults, and one might argue that this man might have committed suicide in any case, but I wish to point out that such cases can now be prevented by modern psychopathological methods (See author, "On the Prevention of Suicide," *Am. Jour. Insanity*, Oct., 1914), and that the inefficiency of the procedure employed by this man is clearly shown by the considerations in this article. His blind faith was tantamount to hiding his head from calamity, so that when he could no longer hide from it, it overwhelmed him. The rational procedure would have been to have fitted his psyche to prevent or avoid the catastrophe which he had seen months before. (See author, *Monthly Cyclope-dia*, 1909).

Need of Neurological Training in Psychotherapy—Contrast the following as illustrating the imperative necessity of medical training in caring for nerv-

ous disturbances apparently entirely mental:

An engineer of 38, referred by Dr. Atkinson, a powerful, energetic man, formerly accustomed to active work, began to be unable to concentrate upon the office work to which he had confined himself for over three months. Previous to this he had been much less active, and latterly he had been very much worried by an official inquiry into a contract for which he had been mainly responsible. For no cause known to him he feels a dread in the mornings, and an indecision in business matters is now realized to have been present several months. There was no syphilis nor any other organic disease.

He had been improved by three weeks in the woods, during which he was very somnolent, but relapsed at once upon return, and could hardly stand his morning suffering. There was no insomnia.

Physical Examination—The reflexes were rather active, but there was no other objective change in the lower neurones; there was no amnesia; the sexual hygienic was normal. He was much depressed, and longed to go away from it all for a year, which he could well afford to do.

Treatment—He was sent for three weeks into the mountains. This time he fully recovered on account of the light diet which he took. Breakfast and supper were fruit and milk, and his mid-day dinner was vegetables and six ounces of meat; after a few days cereals were added morning and night. He has remained well for three years, having been taught proper hygiene. (See author, "Treatment of Antecedents of Arteriosclerosis, Monthly Cyclopedia, 1911, Med. Times, 1912, etc.)

The Futility of Empirical Suggestion.

Suggestion of any kind is a very crude measure at best, and does nothing to build up self-mastery. It weakens rather than strengthens the resistance to incoming ideas or habits in the future. It makes one dependent upon the behest of another. It is a morphine of the soul.

Not only so, but it is inadequate to remove symptoms when compared with the superior analytic and synthetic methods we now possess.

Here is a case which shows inadequacy of crude "suggestion."

Efficacious Medical Healing of Neurosis—Psychotherapy.

Opposed to the irrational and haphazard methods we have just examined is the real psychotherapy. It is dependent neither upon "suggestion" (though it rarely avails itself of this method as a short cut to save time in selected cases), nor upon morbid anatomy (though the diagnostic knowledge of this branch of medicine is a prerequisite to its efficient practice). Neither does it rely upon the domination of the weak and ailing by a stronger will. And the mere development of confidence in the doctor is not its secret. If any proof of this last fact were needed I could cite very many cases where both doctor and patient have wondered at the failure in spite of complete faith in the doctor. The North Carolina boy case above cited was just such a case.

The real psychotherapy is rather a method of scientific psychoanalysis and synthesis, a dissection of the mental tendencies until the real root of the fault is detected, followed by a putting of them together pointing in a new direction, so to speak, and keeping them pointed in this healthy direction by frequent adjustment of vacillating tendencies, and seeing that the patient's own will is used in the effort. It takes time and much skill, as well as knowledge of psychopathology. Its rationale is illustrated by the case which follows. The first of these shows the effect of a correct analysis.

Attempted Suicide; Psychogenesis:

Therapeutics.

A farmer's son of 22, after some weeks of moody behavior, threw himself into a creek. He was quickly rescued by his brother, who reproached him severely. This did not deter him; for a few weeks later he swallowed laudanum. This led to his removal to a sanatorium, where, after a few weeks, he crushed and swallowed an electric light globe. Later, he gained access to a medicine cupboard, and again swallowed laudanum. So his friends in despair brought him to a doctor friend in Washington, who immediately asked me to see him.

Examination showed no physical disorder; but I discovered that there existed a serious psychological situation,

which no one had even suspected—much less attempted to penetrate.

The boy was so ashamed of himself, although still determined to commit suicide, that it was hard from his whispered utterances to reveal the facts from the analysis of which was furnished the very simple explanation of his distressing predicament. To state the position briefly—upon this boy had devolved since the death of his father, the management of his mother's farm. But a younger brother had succeeded in interfering a good deal with our patient's plans, much to his mortification; and when also neighbors' meddling was acquiesced in by his mother, the situation became intolerable, as he had already failed in an attempt to work happily in another environment which he tried for over a year. So that suicide seemed the only escape.

The manner in which the psychological situation was ascertained is best judged from a transcription of the questions and answers of part of the examination:

"What is the matter?"

"Stomach troubles; if I could get well I would be alright."

"Have you any pain?"

"No."

"Why are you then complaining?"

"Because by bowels do not work."

"Why take so much laudanum?"

"Because I think I should be better off if dead."

To a further question:

"If I could be cured I would be content."

"I could not stand being worried by my brother of 19, and my sister, who is 24, and my mother. I want to go and work for myself. I should get on better."

(He had forgotten to mention his sister and when she was mentioned, he stammered).

"They pick on me; for example, if I get up too early; and I always feel I could not do the things I want to do. But when I went to California, I felt uneasy even when working alone. I have been dissatisfied all my life. I do not know what my trouble is or what I have done different from any one else."

To a further question:

"I went to school."

"Have you done anything with which to reproach yourself?"

"No. I think there must be something wrong with my brain."

To a further question:

"The whole case is imagination."

"Why do you think so?"

"I do not know."

"Since when have you thought so?"

"Since four years ago, when neighbours would interfere with what I had done on the farm; for example, in planting the corn, people would comment upon it, and my mother would take their advice and overrule my way."

"Why do you take it so hard?"

"Because I have poor judgment."

The inquiry was then pushed with regard to his relations with the opposite sex. He declared that he had liked their society, although he did not dance and was not "immoral," as he called it, but he confessed his bashfulness and also that he thought girls were not worth spending so much money upon as was necessary; he did not think they were dependable, and he had decided not to marry because of seeing so much of married life; he had never cared for any particular girl, although he had often desired them, but had not the "face" to make advances towards what he thought to be wrong, as at school boys and girls had been separated, besides the girls laughed at his timidity. Accordingly, he told the other boys that their indecent talk was wrong, and was laughed at for his pains and made still more bashful and ashamed. However, he had dreamed of erotic situations, which made him feel ill; and he feared it would injure his health. As a small child, his dreams had been terrifying, such as falling and being killed, or being run away with by horses; but these had not troubled him since.

There had been no spontaneous diurnal emissions; but he had provoked them until he was 18, and had then ceased to do so, as other boys often teased him about it, and said that he would be impotent, as he had ruined himself; hence he was very much ashamed.

Interpretation.

The failure of this boy to stand up for himself was due to his own shame at the onanism he had practiced and his fear that it was injuring his mentality; so that he was not able to stand up against other boys, by whom he was much teased; in consequence of which

he withdrew from social life, especially where girls were concerned, and became taciturn and irritable.

He had to confess that if he could be well his stomach pains from the glass and of what he thought incurable, viz., "a hopeless mental inferiority which masturbation must have caused," he would be willing to live, and would like to work.

Treatment.

He was assured, and examples were given him to show that he was quite mistaken about the effects of onanism; and he was asked to think over until the next day the explanation I gave him concerning the genesis of his shame and timidity, meanwhile promising not to attempt suicide until he had seen me again.

The next day discussion was resumed until, in less than a week, the boy could be trusted alone, not only in the hospital grounds, but in town. He went home in ten days perfectly cured, and has been at work and in good spirits ever since, now nine months ago.

The treatment was conducted in a general hospital; and the maximum of freedom was allowed the patient from the first, the greatest tact being urged upon those who nursed him.

Which the pains referred to the stomach, which of course disappeared, were merely an attempt at fixation of his discontent upon a bodily symptom. The glass swallowing furnished the suggestion for this, a very common mechanism in hystericals.

Remarks.

It should not be necessary to point out that much of what the patient said about renouncing marriage, for instance, was a mere excuse for his own inadequacy and shame. But it is necessary to assert that the sexuality as such was not the important feature in this case in spite of its conspicuous featuring in the history. The really efficient pathogen was incapacity of social adjustment due to shame at his own failure in social adaptation because of the half-heartedness of his attempts, due to erroneous notions about the consequences of his conduct.

The patient actually knew all the facts; but from ignorance he was unable to interpret them. When their import was understood, he learned to

adapt in only a few weeks. The case is again an instance of conceptual error of which the affective situation is merely consequential, and spontaneously disappears upon rectification of false notions which produce it.

Love Sickness in a Man.

Another case of contemplated suicide in a young banker was caused by a period of prolonged strain and overwork, culminating in a serious rupture of an engagement which had lasted six years. The patient was lachrymose, agitated, trembling by fits and starts; he would rush from the table suddenly with the desire to kill himself, or break into tears without provocation, especially when with his family. At his work he appeared comparatively calm, but it was only by an intense effort, which further debilitated him. He had lost 49 pounds in weight. His relatives exhorted him to buck up, forget it, or sometimes chaffed him about it all. This only aggravated his distress, which a progressive insomnia kept augmenting.

The treatment used was to convince him of the need of distraction from his painful ruminations, and that this could be done only by hard physical work, which would at the same time increase his resistance to painful memories, by removing the weak irritability of his nervous system. He was sent to the country two or three times before the right kind of place was found, and before he learned to arouse himself from the bodily lethargy and mental concentration upon his troubles. Eventually the right place was found, where wood-chopping and farm work kept his mind occupied and restored him physically. He now feels better than he has for ten years, and is again at the head of his business.

The love-sickness of this patient was only one of the factors in the case, but it is frequently the outstanding feature of a nervous breakdown. It is very wrong to meet it lightly. The proper analysis of the situation should always be undertaken and the co-operation of the patient enlisted toward overcoming the troubled mental state. There is practically always some psychological fact concerning which the patient needs enlightenment, after which he can manage the situation. Psychotherapeutic results of the kind I describe are by loose thinkers attributed either to sug-

gestion, to faith or to confidence in the physician; but it cannot be too strongly stated that neither of these factors is the prime one in any of the cases with which I have to do.

Were confidence the important element I should not succeed where the family physician had failed, for while in him the patients usually put a trust almost blind, to me most of them have come almost sceptically. Confidence, of course, has to be gained; but as neither apparatus nor manner is of an imposing character in my consulting room, that confidence comes only as a result of the patient's appreciation that an understanding of the situation is being developed.

As to suggestion, I take the greatest pains to avoid fallacious short cuts to the removal of symptoms of which I seek to reach a foundation by giving the patient a rational understanding. When this is done the patient needs no moral support from the physician nor any one else; for having learned his own psychology he knows how to direct himself. Hence, when the cure is complete relapses do not occur.

It would have been desirable to have included in this account some cases which had already visited the faith healers without success. I have several such, of which, unfortunately, social considerations prevent the full report without which there would be little instruction to the readers.

Eugenic Love.

Eugenic courtships are being conducted at the Herne bay beach, near London, where crowds are swarming to witness the spectacle of lovers, certified as physically fit, enjoying the happy interlude between engagement and marriage.

The couples are enrolled as students of the summer school of eugenics and civics, whose numbers are limited to ninety-nine. The official reason given for this odd figure is that "experience shows that such a number is neither unwieldy nor non-social."

In every case the engagement has been preceded by the exchange of detailed medical certificates, and it is held

the summer study of eugenics of healthily matched men and girls under conditions prevailing at Herne bay gives the students an ideal opportunity to discover whether they are mated as well temperamentally as physically.

Spectators are disappointed at the course pursued by eugenic love. They say it lacks the abandon of the uncertified spooning of lovers who splash together in the sea and sprawl about on the sands. The students are extremely self-conscious. "If this sad, scientific romancing grows, we shall soon hear no more of saying that all the world loves a pair of lovers," is the verdict of non-eugenic observers.

The students deny that they are making a solemn ritual of health. "Our principles will stand by us and bring their due reward long after the love intoxication of the scoffers will have cooled," they declare.—Medical Standard.

Where Do You Get That Stuff?

An American Red Cross official from a Northern State recently had occasion to go to South Carolina on business in connection with the forthcoming Red Cross Roll Call to be held November 11-25. He had never come in direct contact with our "cullahed" brethren before and was so interested in the dark skinned servants of the household that his host, chairman of the local Red Cross chapter, took him to see a ball game between the home town negre team and a visiting team of similar color.

The pitcher had gone rather wild, and had permitted all the bases to fill. Another man came to the bat, and the nervous pitcher shot one over.

"Ball one," yelled the umpire.

The pitcher tried again.

"Ball two," was the decision.

Another effort by the hurler . . .

"Ball three," said the umpire.

The pitcher saw his predicament and made one master effort to save the day.

"Ball four," yelled the umpire, "and the man's out."

"How come, I'se out?" inquired the enraged batter.

"I'se repelled to put you out nigger. Don't you see dar's nowhere else to put you?" reasoned the umpire.

The New Charlotte Medical Journal

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CHARLOTTE, N. C.

"Read not to contradict and confute, nor to believe and take for granted, nor to find talk and discourse, but to weigh and consider."—Francis Bacon.

DID WE FIGHT IN VAIN?

"We have met the enemy and they are ours"—Are they? Autocracy, as fostered by the "Central Powers," was silenced but "a man convinced against his will is of the same opinion still." Yes, we fought and conquered but why did we fight and did we fight in vain? Has the end for which we fought actually been accomplished?

Four million of America's best young men were assembled, armed, equipped, and trained. Two million went overseas—50,327 gave their lives, not for territory, not for loot. No, no. We proclaimed that what we wanted was to stop war. That was why our soldiers went to France, fought and died. "They fought," said our Secretary of War, "to put an end to war, and the men who lived in the trenches, under shell fire—who saw high explosives and were bombarded from the clouds, want an end put to war."

In the face of the world's croaking and as a result of America's urging the League of Nations was formed and made a part of the Treaty of Peace.

It was formed by the legal representatives of the Allies in council, the only way it could be formed, and was made a part of the Treaty of Peace for the purpose of keeping the world in mind of our present purpose and future intention—to prevent future wars.

The proposal that we now go back on all this, desert and insult our Allies, and put ourselves outside their company and line up with Germany, Russia and Mexico is inconceivably base. It means our Honor and Honor to right minded men means more than life itself.

If we have no thought of Honor, have we no duty to these fifty thousand and more men who gave up their lives?

The League of Nations was planned by the combined counsel of the representatives of the nations lately under arms to avert future war and to bring to a quick conclusion any conflict that might break out.

A number of subsidized conscienceless newspapers have been most industriously printing editorials and cartoons in an effort to make it appear that the League of Nations would get America into war. It is the exact opposite of the truth, for the League of Nations is the concerted effort of the civilized nations of the world to stop war, and war can be stopped in no other way.

But by cunningly pounding away at this lie such papers eventually lead the ignorant to think it is the truth. For America to remain out of this League would tend to perpetuate the old order which always has produced war and always will produce war. When we had no League we were drawn into a European war, were we not? Suppose it should be necessary for a few of our soldiers to help do police duty—which is better? Do you want to live in a community carefully watched by police officers or one torn to shreds by a mob.

The consequences to ourselves and the world of the United States failing to enter the League can not be measured, but no one has more clearly prophesied the results than Secretary Baker:

"If we stay out of the League, which now exists, and it fails for want of our help, Europe will redivide into alliances seeking to establish a balance of power, and the next explosion there will scatter its fragments on our shores, just as this one did, and finally draw us in. On the other hand, if we go into the League we will help to erect a unanimous opinion of mankind on international questions, and no nation would be strong enough or foolhardy enough to embark in a war against the unanimous judgment of mankind."

As to signing away our rights—that is ridiculous, perfectly silly and reminds one of nothing so much as the spoiled and pampered child who pouts and "won't play" because some other child is recognized as being present too.

Thirty-nine nations have already entered the pact. They did not do this

hastily or rashly. They knew the risks. And every one of these nations is just as jealous of its national integrity, its sovereignty and its honor as we are.

No, it is not a question of national rights or world good. The only reason today why the United States is withholding her hearty co-operation in a movement for World Peace and retarding civilization in a step forward is because a few pampered and supremely selfish blatherskites who have no Honor and no respect for our fifty thousand heroes who died, pouted, pulled hair, kicked down the play house and everybody else's shins, filled the atmosphere with vile vituperation and went home to build a play house of their own.

And that is just what they are now intimating they will do—build a League of their own, build a League centered with a great big "I."

To the great medical profession we put the question—to the profession than which no other class of men sacrificed more or more willingly—"Did we fight in vain?" Did we sacrifice and fight to stop war only to have our labors lost because of the diabolical and supreme selfishness of some few demagogues.

Every member of the medical profession is an educated leader among men and every member of the medical profession should now insist on our nation's honor and our duty to the fallen heroes.

COMING TRI-STATE MEETING, SPARTANBURG, S. C., FEB. 16-17.

The coming meeting of the Tri-State Society in Spartanburg promises to be a meeting of real worth and helpfulness.

Continuous re-breathing results in death. Re-thinking of the same thoughts results in mental death. We need new ideas to save us. No doctor on earth can long continue doing justice to the sick intrusted to his care, who fails to meet and mingle with his fellow friends in the medical profession and gets out beyond the confines of his own little circle of every day association.

The Tri-State Society is not large enough to be unwieldy but is large

enough to give to those who attend a new vision and a broader perspective. Its meetings are a good place to go and give and get new ideas, new inspiration and also, and this is just as valuable as any other phase, to have a little relaxation and healthy rest in social intercourse with others.

The doctors of the Carolinas and Virginia have common problems to solve, common ideas and ideals—they really all belong to the same family. The Tri-State Society, if now it is free from "politics," and selfish aspirations, ought to be and indeed is our very best society.

May we presume to say that in all probability no one gets more good from a paper or a discussion than the man who prepares the paper or makes the discussion. The Bible itself says "'Tis more blessed to give than to receive."

Then let's begin now planning for this coming meeting. Get all the ideas you wish to pass on to others, systematically arranged in your mind so you can express them clearly, quickly and convincingly. Then get a great big room in the deep recesses of your brain thoroughly cleaned of prejudice and rubbish then fumigated to kill all infection from stale and decaying "re-thinking" that you may store it full of new thoughts and helpful hints to take back home where they may be used to help relieve suffering and prolong human life.

The meeting will entertain a few other big men beside yourself. The program will be full enough but not too full. There will be men on the program who have a world wide reputation already, while there will be many others who (secretly) hope some day to have.

Spartanburg, S. C., Feb. 16-17, 1921.

Benefits From Meetings of Professional Organizations.

Jour. A. M. A., Aug. 7, 1920.

The president of the American Bar Association, in an open letter to the members, defines that organization as the "tie of fraternal interest in all that concerns the profession that binds it together." While the communication is addressed to members of the legal profession, its truth applies equally to physicians. The following statement re-

garding the value of the annual session is paraphrased but little in order that it shall appeal to fellows and members of the American Medical Association:

The sight of the leaders of the medical profession is stimulating. It adds much to the interest with which a medical paper is read if the author is not an abstraction but a creature of flesh and blood, whose personal appearance is known and whose voice has been heard. . . . Of these things I am sure: that the sense of brotherhood and the belief in the friendliness and nobility of the profession will be strengthened by such contact, and that faith in the zeal and integrity of members of the profession will be justified by experience. The reserve potential strength of a profession like ours can be summoned to effective exercise only through an association, national in scope, and wielding the consolidated strength of a united and thorough patriotic organization.

The meeting of the constituent state medical associations and of the component county medical societies present opportunities both for an interchange of professional knowledge and for an appreciation of personality which must make all better fitted to render professional services to their fellow men.—

COMING MEETING OF THE NORTH CAROLINA SECTION OF THE CLINICAL CONGRESS OF THE AMERICAN COLLEGE OF SURGEONS, CHARLOTTE, N. C., JAN. 20-21, 1921.

The American College of Surgeons was organized ten years ago at Washington, D. C., and is patterned in a measure after the Royal College of Surgeons of London which is nine hundred years old.

As it now stands it is composed of about five thousand picked surgeons from the United States, Canada and Mexico.

The College holds a Clinical Congress each year. This congress is held in one of the large cities, usually New York, Philadelphia or Chicago, because it takes a large city to furnish suitable hotel reservations and second because nowhere else is sufficient clinical material available. The last session was held

in October in Montreal, the largest city in Canada. This meeting was wonderful from several standpoints. Especially did it give the Canadians an opportunity to come in close touch with the College. On the other hand it was a revelation to the fellows to see the splendid hospital work that is being done by the surgeons in Canada. The advantages to be gained by visiting the leading surgical clinics is one of the central ideas of the College. A distinguished Canadian surgeon, Dr. Geo. E. Armstrong, was elected President for the ensuing year.

The College is built upon a high plane. The essence of the whole thing is that American surgery be done after the most approved scientific teachings and in hospitals that are properly equipped. The surgeon who is recognized by the College must be honest, capable and imbued with the idea of service. This eliminates those who buy and sell patients, those who have not been properly educated and trained and the dishonest man. It also eliminates the hospital that is not properly equipped and will not spend money for laboratories, that will not keep records, and that looks to the dollar gained rather than the good of the patient.

The popularity of the College is shown by the fact that while there are five thousand fellows already accepted, there are fourteen thousand applications on file.

It can be readily understood that so large a body is unwieldy and can not meet except in the larger cities. For that reason the College, through the central organization at Chicago, is organizing the states and provinces into clinical sections and are holding sessions in each state and province throughout America.

North Carolina, as she usually does, takes the lead in this matter and she was the first to organize a state section. The North Carolina Section of the Clinical Congress of the American College of Surgeons was formally organized November 12, 1919, at the Battery Park Hotel. The second meeting was held in Charlotte April 21, 1920. The third meeting was held May 17th in Greensboro. At this meeting it was arranged to hold a clinical session in Charlotte January 20-21.

The clinical sessions that have been held throughout the west are reported as being a howling success. They have been presided over by Governors and Senators and other distinguished citizens. In each city there has been held a two or three days clinic. The local fellows operated at the various hospitals. There has also been held a public meeting beginning with a supper and winding up with a talkfest. At this meeting from four hundred to one thousand people have been present. The idea is to get the public interested in the meetings because it is for the ultimate benefit to the public that they are being held. It is proposed that the Charlotte meeting shall equal any of the western meetings. The following tentative program indicates something of the work that will be done on that occasion:

First Day—January 20th.

9-1. Clinics will be held by the Charlotte Surgeons at the Presbyterian Hospital and the Sanatorium.

2:30-4:30—Scientific Session.

1. Removal of Ureteral Stones by Cystoscopic Manipulation. Illustrated with lantern slides—A. J. Crowell, Charlotte, N. C.

2. Gynecological Paper—F. Webb Griffith, Asheville, N. C.

3. Surgical Paper—E. T. Dickinson, Wilson, N. C.

4. Surgical Paper—H. F. Long, Statesville, N. C.

5. Discussion of Morning Clinics and the Papers—E. A. Lockett, Winston-Salem, N. C.

6. Discussion and Summary—Dr. W. J. Mayo, Rochester, Minn.

4:30-5:30—Business Session by the Fellows of the American College of Surgeons.

7:30-10—Public Session.

1. Introduction of Governor Morrison—J. F. Highsmith, Chairman, Fayetteville N. C.

2. Remarks by Governor Morrison.

3. North Carolina Hospitals—J. P. Munroe, Charlotte, N. C.

4. The American College of Surgeons as an Organization—Franklin H. Martin, M. D., Chicago, Secretary-General, American College of Surgeons.

5. How the people of North Carolina may be benefited by co-operating with the Medical Profession—W. J. Mayo.

6. The Value to the Public of Group Medicine—Doctor from G. H. Q. or their selection.

7. Standardization of Hospitals—John G. Bowman, Director, American College of Surgeons.

8. Address on the Relation of the Public to the Medical Profession—W. S. Rankin, Pres. American Public Health Assn.

9. Closing remarks—Governor Morrison.

Second Day—January 21st.

9-1—Clinics at the Presbyterian Hospital and the Sanatorium.

2:30-4:30—Scientific Session.

1. Discussion of Clinics—H. A. Royster, Raleigh, N. C.

2. Surgical Paper—Biggs and Norris, Rutherfordton, N. C.

3. Surgical Paper—J. E. Stokes, Salisbury, N. C.

4. Symposium: Eye, Ear, Nose and Throat—C. W. Banner, Greensboro, H. H. Briggs, Asheville, et al.

5. Gynecological Paper—N. D. Bitting, Durham, N. C.

6. Hospital Records, illustrated with lantern slides—J. W. Long, Greensboro, N. C.

7. General Discussion and Summary—J. M. T. Finney, Baltimore.

4:30—Executive Session by the Fellows of the College.

J. F. Highsmith, Chrm.

H. A. Royster, Councillor.

J. W. Long, Secretary.

Executive Committee.

SEABOARD SURGEONS' MEETING.

The 17th Annual Session of the Association of Seaboard Air Line Railway surgeons was held in the convention rooms of the DeSoto Hotel, Savannah, Ga., December 1-2, 1920.

The meeting was, like all are, well attended and the influence will not only better the efficiency of the Seaboard surgeons as such but will also be an uplift to the entire medical profession wherever these doctors as individuals work and live.

The program was well balanced in the scope of subjects covered and the general atmosphere radiated careful conscientious effort to give and to get the very most help and co-operation possible.

We would like to publish the program in full but space forbids.

The association's officers are:

Chief Surgeon—Joseph M. Burke, Petersburg, Va.; President, Surgeon L. J. Picot, Littleton, N. C.; First Vice President, Surgeon R. S. Catchcart, Charleston, S. C.; Second Vice President, Surgeon Gilbert McLeod, Carthage, N. C.; Secretary and Treasurer, Surgeon J. W. Palmer, Ailey, Ga.

Executive Committee—Surgeons R. B. Eting, Greenwood, S. C.; W. C. Powell, Petersburg, Va.; F. R. Harris, Henderson, N. C.; S. E. Harmon, Columbia, S. C.; E. H. Terrell, Richmond, Va.

FUNDS OF MEDICAL EXAMINING BOARD.

The law of North Carolina authorizes the State Medical Society to nominate the members of the Medical Examiners and provides that members of this board may receive a per diem compensation for time actually devoted to the discharge of the board's duties of \$4.00 each per day and legitimate expenses. This law, however, does not specify any source from which these funds may be supplied, hence the Attorney General ruled that if the board received this compensation it would have to be derived from a fee charged each applicant for registration.

Records do not indicate that any board has retired from office with any surplus in the Treasury until the board retiring this year and they have managed by extra economy to save from the fees always charged a surplus of about \$4,000.00. By precedent this amount could have been used by the board and charged to expenses with probably no one raising a word of objection. The amount of course does not belong to the State or any institution of the State except the doctors from whom it was derived, although the outgoing board had a perfect right to dispose of it in any honorable way their judgment decided.

Since this outgoing board choose to report to the body which appointed them and ask their desires as to the disposition of this fund, the *Journal* wishes to call attention to the fact that the medical profession itself needs all the funds available for the uplift and bet-

terment of the profession, to place it on the highest possible level, to prosecute vampires and those who illegally thrive on the credulity of the ignorant by practicing medicine without adequately qualifying themselves to carry this supreme responsibility.

The incoming board find themselves, as other boards have done, without one penny of funds for carrying on the work they have been assigned to do, until the next examination.

If the examining board are charged with the responsibility of determining who are qualified to care for the State's sick then they should, as they are, be designated a board of trustees to disburse the funds accruing to the board in whatever way will do the profession the most good. And it should be understood that any funds left in the treasury at the expiration of any term should automatically be turned over to the incoming board that there will be no break in the continuous watchfulness over the profession's best interests.

This fund was derived from the doctors now in the State, it still belongs to them exclusively and we object as vehemently as we may to its being diverted to any other purpose whatsoever, however laudable that purpose might be.

CHARLOTTE NEGRO HOSPITAL TO HAVE ANNEX.

At a meeting of the members and friends of the Good Samaritan Hospital held recently, formal plans were made for laying the cornerstone to a new annex.

Twenty thousands dollars will be expended in making this much needed improvement and enlargement. The Sunday School Association of the Negro Churches of the city is backing the plan with Henry Warren as director and President of the organization.

The Good Samaritan Hospital is the only institution in the city of Charlotte where negro patients can be cared for and the present facilities do not come anywhere near filling the need. Until this new addition is completed the negro population are not getting the hospital care they should have. Not only the Charlotte people but those of surrounding territory should give this movement every encouragement and support that our colored folks may be cared for as they should be.

Urology

A. J. Crowell, M. D., Department Editor

Sodium Oleate in Specific Urethritis.

Davis and Swartz in their experimental studies at the Hopkins clinic and recorded in the October Journal of Urology find that sodium oleate solutions can be borne in the urethra without symptoms of irritation up to a strength of 1 per cent. These experiments suggest the use of a mixture of sodium oleate and boric acid as an adjuvant to other drugs in the treatment and prophylaxis of gonorrhea. In the case of irrigations, the soap would assist the cleansing action, in addition to its germicidal or opsonic value. In prophylaxis, the action of soap should be taken advantage of within the urethra as well as externally, where its value has long been taught.

They conclude that:

1. Sodium oleate has a definite germicidal value for the gonococcus.
2. This value is increased, where uncoagulated protein is present, by the addition of boric acid.
3. The presence of small, sublethal quantities of sodium oleate increases the germicidal action of many drugs against the gonococcus. With others it is without effect.
4. Sodium oleate with boric acid is suggested as an adjuvant to other drugs in the treatment and prophylaxis of gonorrhea.

Kolischer, G.: What Should We Do With Bladder Tumors?

(Illinois M. J., 1920, xxxviii, 21.)

For benign tumors of the bladder the author advocates either fulguration or galvanocauterization followed by the use of radio-active substances. He feels that the tendency of papillomata to recur rapidly after excision by the knife contra-indicates excision.

Fulguration is effective if the papilloma is truly benign, but as it is so difficult to determine whether it is benign the use of the galvanocautery followed by radium is safer if there is any reason to suspect malignancy.

The author is convinced that the radical surgical excision of malignant blad-

der tumors has failed as the primary mortality is high, the convalescence is tedious and painful, and the procedure is followed by early recurrence.

Kolischer believes that the bladder should be opened for drainage and for the treatment of urosepsis, hæmorrhage, or uncontrollable spasm. Through the widely opened bladder the growth may be treated by diathermy (electrocoagulation) which permits exact application and dosage. Such treatment seals off the lymphatics, stops hæmorrhage and pain, and is the most efficient means of combating malignant growths. The author always supplements this treatment with radiotherapy.

Geraghty, J. T.: The Value of Radium in the Treatment of Bladder Tumors.

(South. M. J., 1920, xiii, 511.)

Before 1910 the only method of treating bladder tumors was excision by operation. Recurrences were frequent, especially in cases of benign papilloma as transplantation occurred at the time of operation. In the records of the Hopkins Clinic up to 1910 Geraghty was able to find only one cure after the removal of a papilloma by operation. Since the introduction of fulguration, however, only one case of papilloma has been treated by operation.

Vesical tumors which respond most readily to fulguration are the benign papillomata. Those which do not respond to this treatment or are made worse by it are papillary carcinomata. In an intermediate group are tumors which clear up quickly after fulguration, and others which approach in their resistance the true papillary carcinoma.

Geraghty classifies bladder tumors as follows:

In the benign papilloma the connective tissue axis is covered by an epithelial structure identical with the bladder mucosa. In malignant papilloma the malignant changes are confined to the epithelium alone, there being no evidence of invasion of the connective-tissue framework. In a papillary carcinoma the epithelium breaks through the basement membrane, invading the axis of the papilla, its main stalk, or the bladder wall itself.

Geraghty has studied 170 cases of bladder tumor, 79 of which were papillomata (benign or malignant); 90, pa-

pillary carcinoma which infiltrated the bladder wall; and 1, a basal-cell carcinoma.

All papillomata, benign or malignant, respond to vigorous radiation with radium. The more malignant the growth the greater the amount of radiation that is necessary. When extensive infiltration has taken place it is impossible to cause the complete disappearance of the tumor with radium.

In treating the malignant type of papilloma Geraghty has observed that those which are resistant to fulguration are easily destroyed by fulguration after they have been radiated.

As early papillary carcinomata are stimulated to growth by fulguration, radium alone is used except when there has been extensive infiltration of the bladder. Geraghty's routine is to radiate all papillary tumors except those which are benign, in which fulguration effects a cure. Between 103 and 210 mg. of radium elements are used. The radium is applied with a specially built cystoscope which is held in place by means of a mechanical arm attached to the table. The bladder should be moderately distended with water. Radiation is given for one hour, one to three times per week, depending upon the size of the tumor and the reaction.

A differential diagnosis between benign and malignant papillomata is not of great clinical importance as the great majority of the malignant type respond to fulguration. The differential diagnosis between papillary carcinoma and papilloma, however, is essential as fulguration fails in cases of papillary carcinoma.

In the author's experience it is frequently possible to distinguish papilloma from the papillary carcinoma by means of the cystoscope, but a differentiation between a malignant and a non-malignant papilloma cannot be made from the cystoscopic findings alone unless the malignancy has advanced so that infiltration in the bladder wall has taken place. Necrosis is indicative of carcinoma. In advanced malignancy the tumor or the bullæ around its margins usually indicate cancerous invasion of the bladder wall. Small tumor nodules seen beyond the main growth are indicative of cancer.

Geraghty finds palpation of value in the diagnosis as the tumors involve the

posterior bladder and when infiltration has taken place the induration can be felt.

Excision of tissue is done only occasionally as other methods are usually sufficient. In many instances a bit of tissue may not indicate the malignant nature of the tumor, although cancer cells may be present in other parts of the growth.

The presence of a severe intractible cystitis associated with a bladder tumor is strong evidence in favor of the presence of an infiltrating neoplasm.

Geraghty draws the following conclusions:

While benign and malignant papillomata and the early papillary carcinoma disappear under the influence of radium, the infiltrating types are very resistant to this agent. Therefore, when the infiltrating character of the growth has been determined and the tumor is sufficiently localized so that it can be removed completely a radical resection is indicated. Following the removal of an infiltrating papillary carcinoma, cystoscopy should be done at an early date as recurrences, which are not infrequent, will often yield promptly to radium, notwithstanding the resistance of the primary tumor. It is of interest to note that the use of radium has not diminished the tendency of bladder tumors to recur, recurrences being observed in about 30 per cent of the cases treated.

Radium has proved to be a valuable aid in the treatment of bladder tumors, and while the results obtained in the infiltrating types are far from satisfactory, an improved technique whereby more intensive radiation may be given safely, may offer a more encouraging outlook in the future.

Nervous and Mental Patients in the Hospital.

Washington, D. C.—The U. S. Public Health Service will soon convene in Pittsburg a board consisting of Dr. A. J. Ostenheimer, of Philadelphia; Dr. T. Diller, of Pittsburg, and the officer in charge of the Marine Hospital to arrange for the setting aside in the hospital of a section for the diagnosis of neuro-psychiatric patients from the third district of the service, comprising the States of Pennsylvania and Delaware.

Gynecology and Obstetrics

Robt. E. Seibels, M. D., Department Editor

Breast Binders—A properly fitted, properly applied breast binder is a source of great comfort to the patient; one that is applied loosely and "rides up," or too tight, and causes pressure, may be a source of great unhappiness. Very few nurses are taught how to apply them, a few are too lazy to apply them, some have an antipathy for them and deliberately allow them to be uncomfortable in order to get the patient on their side. But the best and most experienced nurses are greatly in favor of them, for they have seen how a snug, well fitted binder adds greatly to the mother's comfort.

We have been accustomed to use the Murphy pattern and have the binders made of unbleached muslin. These are washed frequently and are nice enough for the most fastidious. In the hospital service where binders are not cut to fit the individual, they are made for a size 38 bust and a pleat is taken in the back so as to reduce this to the patient's bust size, if necessary. If this is not done and the binder is overlapped in front, it will not be comfortable. The straps should be pinned on the top of the shoulders and the binder pinned in front so that it is snug but not tight over the upper breast. Then a pleat is taken with safety pins under the breast so as to lift it up and another pleat taken in the axillary line if there is any looseness there. These pleats, if taken carefully, make this binder neat and snug and it is the failure to take them and the endeavor to fit the binder over the contours of the breasts by pulling it tight in the median line, that makes it unsatisfactory to some of its opponents.

We apply the binder on the third day post-partum and require it for the next seven days. After that we allow the mother to use it or not as she prefers, but we advise it to support the breasts, prevent a tendency to caking and, in some measure, to lessen the sagging of the breasts after lactation.

In summer, some patients prefer to use what are sold at stores as "bras-sieres;" these may be obtained of heavy net and are cooler than the unbleached muslin.

A piece of cotton flannel, one inch square, with the fluffy side next the nipple, is interposed to prevent the binder from being soiled by the secretion and to prevent its rubbing the nipple.

The "Prophylactic" Forceps Operation—J. B. DeLee, in the *Minnesota Medical Journal* (1920, iii, 317), discusses the use of forceps to prevent injury to the child from prolonged pressure. Most obstetricians have some rule for the use of forceps in this connection. The indication for the operation in frank dystocia are well known, but there is less agreement where there is no absolute obstruction offered by the passage or the passenger. Statistics certainly seem to prove that a careful forceps operation has a lower fetal mortality than a prolonged unassisted labor. Complete dilatation of the cervix for two hours without advance of the head, or the caput in sight for thirty minutes without advance, is our rule for the prophylactic forceps. Of course no rule takes the place of judgment but we certainly debate the question of interference after the lapse of the above-mentioned intervals.

PEDIATRICS.

Yates Faison, M. D., Department Editor.

Few Points in Normal Breast Feeding.

Statistics show conclusively that human milk is the only ideal infant food, and that the results of breast feeding are vastly superior to those of artificial feeding—we find that the mortality rate is much lower in infants fed on the breast than those fed artificially. This is enough to show us that it is the duty of every physician to teach and to preach to every mother the importance and the superiority of maternal feeding, and to refuse to discontinue unless absolutely necessary.

This subject of course could only be covered in full in a text book or long thesis, so I will attempt to present only a few points that may prove of some practical value.

The regulation of feeding times and intervals is one of the most important points in maternal nursing. Definite feeding times and intervals should be

ordered, and this regularity strictly observed. Too often we see a child that has colic, frequent movements, spits up or vomits a great deal, and cries more. From the last fact that it is nursed at any and every time—the more it cries the more it is fed, and the more it is fed the more it cries—if we simply put this baby on a regular schedule we will find that most, if not all, these disturbances, will disappear. A baby is one big habit, and if we take the time and patience we can teach them to do almost anything we want—of course this does not mean that every baby fed at irregular times and intervals will not thrive or do well, for we see too many doing perfectly well on such an irregular schedule—but I do think that we would see a much smaller number that are doing badly. The mother will find it much more convenient as she can plan on a definite schedule—she will save time, for the baby will have much better habits and demand much less of her time and give fewer interruptions to her other duties. If this training in regularity is started from birth there is little difficulty, but if a child has already formed a bad habit of irregular nursing, it takes a little time and patience, but if persisted in, success will crown the effort, and the mother will be greatly the benefactor. Most of the infants I see under 2 or 3 months of age have symptoms and disturbances which are regulated by simply putting them on a regular nursing schedule. The physician should be most insistent upon the mother, of routine and should be emphatic enough in his instructions to impress the mother with the importance of following out his directions minutely.

After many years of the two-hours interval plan for breast fed infants it is now generally conceded that such intervals are never necessary except in extremely small, undersized, or premature infants. The average infant should be put to the breast once every three hours during the daytime (which includes the 9 p. m. or 10 p. m. feeding) and once at night—the night feeding may be omitted after the third or fourth month. Even four hour intervals are preferable for normal, well nourished infants who are growing rapidly in weight. It is always advisable to hold to the same hours each day and to waken the infant for the feeding so that it may establish habits of regularity,

which it will soon do with the proper training. The physician who insists on this plan of regularity will find that he will have happier mothers and better babies.

A mother should always be in a sitting position while nursing a child. If the mother lies down, as a good many do, she must lean over it as it lies flat on its back—consequently the milk will flow too fast and the baby will vomit. If the flow is too fast even in the sitting position and the baby tends to vomit, the baby should be held at a level higher than the breast, which necessitates an effort at nursing on the part of the baby instead of having it poured into its mouth. It is a good plan, as soon as the nursing is finished, for the mother to place the infant over her shoulder and gently pat it on the back. For a few moments—this will cause the air, which has been swallowed during the act of nursing, to be eructated and thus prevent a good deal of discomfort and regurgitation. Then the baby should be immediately placed in its bed and left severely alone for one hour to one hour, whether it cries or not—for the handling, the rocking, the joggling on the knees will do more harm than the milk; these procedures only tend to churn up the milk and cause vomiting.

The length of time that an infant should remain at the breast at each feeding varies with the individual mother and the individual infant. Many infants will get all the milk they need in five or six minutes because the milk is abundant and it flows freely. If a mother with an abundant milk supply is given the usual instructions to nurse her baby twenty minutes, not only will she find it difficult to keep the baby awake, but will also cause the infant considerable indigestion—whereas, if the milk is less abundant and comes slowly, the infant does need to be nursed twenty minutes. The proper way is to nurse the baby until it stops of its own accord or goes to sleep, with twenty minutes the maximum. Do not let the baby “sleep on the breast,” that is, nurse for a minute or two and then sleep for five minutes and continue this performance for thirty to forty minutes—keep him nursing until he has enough and then put him down.

It is not advisable to nurse from more than one breast at a feeding—if the infant is not gaining in weight and is not

satisfied with the milk it gets from one breast at a single feeding, it is better to supplement the breast with a bottle feeding.

There is a class of infants that is of rather frequent occurrence and too frequently badly treated. The infant cries a good deal, has rather frequent stools with numerous curds and perhaps green in color at times, expels a great deal of gas, yet is gaining progressively in weight—the mother is greatly worried and in turn worries the physician—it is a great temptation to take such infants off the breast, but it is almost criminal to do so. The infant is probably being overfed and the food supply should be reduced. This may be done by either limiting the mother's diet, or shortening the length of the feeding time. If the mother is drinking large quantities of liquid nourishment at or between meals, this should be stopped—the richer foods, sweets and pastry eliminated—raw vegetables and the highly flavored vegetables, such as cabbage, cauliflower, turnips, and asparagus may be temporarily omitted.

The amount of milk the infant gets at a nursing may be reduced either by shortening the length of nursing time at each feeding to five minutes and then slowly increasing again as the condition improves; or lengthening the nursing interval to four hours and permitting the normal length of nursing—sometimes it helps to give a certain amount of boiled water just before each feeding. The administration of pepsin or other digestive ferments have proved useless, as these ferments are rarely diminished in the infant—although the physician may be overpersuaded by an over worried mother to give something for the crying, he must realize that he is not improving the condition. Be careful in giving the syrupy mixtures and opiates as they may do harm. The main feature of this type of case is the weight—if the increase is satisfactory, interfere as little as possible.

It is sometimes necessary to fight. More often it is better to agree.

Self interest demands that you be interested in the well being of others.

Orthopaedics

Alonzo Myers, Department Editor

The first program of the newly organized Orthopaedic Section of the Southern Medical Association was given at the Fourteenth Annual Meeting held in Louisville, Kentucky, November 15-18th.

There were sixty-two present who devote their time exclusively to the Specialty of Orthopaedic Surgery. The program following up reconstruction and bone surgery proved to be an interesting contrast to the program of Orthopaedic meetings even ten years ago. This very noticeable change and advancement to my mind is important and convincing that this special line of surgery is becoming better organized and more generally recognized as having a definite scope of work to cover as do other established specialties.

Infections of Bones and Joints—F. D. Cotton, Surg., Gyn. and Obst., 254-262.

Abstract:

This paper is a general review of the subject of infections of bones and joints and gives the ideas of the author as to treatment in such conditions.

In the future the not unusual cases of chronic wound sinuses should be rare. Primary wide debridement has little place in civil surgery. There is no advantage in doing more in cases of osteomyelitis than making a wide open exposure. Remove no bone early when there is infection, but insure wide-open drainage, disinfect, and wait for demarcation.

Cotton emphasized the points that army splints are meant for use in transportation and that even the Thomas splint must be used skilfully. He mentions the frequency with which war wounds flare up when opened because of non-union, even after they have been healed for a long time. The lack of bone salts in cases of non-union may be overcome by a substance such as magnesium.

Cotton is now trying the injection of insoluble lime salts in these cases and suggests that, if this treatment fails, urine salts may be of some avail.

There is usually a three day interval between fever and pain and necrosis. If early exploration is made and the pus evacuated, treatment may be continued in the following manner: (1) drain well, (2) wait for demarcation, (3) wait for involucrum, and (4) use Dakin's solution.

The author obtains more satisfactory results with fat transplants with pedicles than with muscle, and uses bone wax, not expecting it to stay permanently but to be extruded gradually.

In fresh cases of infected joints Cotton washes the lesion with 1-15,000 solution of bichloride of mercury and sutures the capsule tight leaving the wound open. In more serious cases the joint should be laid wide open and disinfected with Dakin's solution.

Concerning the Question of Acute Atrophy of Bone in Fractures. R. Lenk, Fortschritte aus d. Geb. der Roentgenstrahlen. Band XXVI.

Abstract:

In a very lengthy discussion concerning acute bone atrophy in fractures of bone, the author arrives at the following conclusions:

1. Acute bone atrophy is a usual occurrence in fractures of bone.
2. Its appearance is noticeable in the radiogram not later than three and a half weeks after the injury.
3. It becomes localized usually, independent of the site of fracture, in all the joints of the injured extremity; in rare cases the atrophy is more pronounced in the joints nearest to the site of fracture.
4. Inactivity is the greatest factor in its production; only in rare instances may other causes be contributing.
5. The acute bone atrophy is not the cause for delay in callus formation.
6. Its prevention can only be attained by the avoidance of inactivity and early mobilization.

Conclusions—Treatment of Acute Polyarthrititis. Dr. K. Port. Archiv f Orthopaed, und Unfall-Chirurgie.

Abstract:

1. The disease has no relation to rheumatism and anti-rheumatics should be avoided.
2. A focus of infection should be looked for in every case of arthritis where tuberculosis, malignancy or

trauma is not self-evident. The finding of a focus does not mean that this is the only one. The source of infection suspected should be removed if possible.

3. Monarticular arthritis demands the same careful investigation as a case of polyarthrititis, for one can never tell when the former may merge into the latter.

4. Prophylaxis is preventing systematic infection and keeping the genito-urinary and gastro-intestinal tracts in good condition is essential. Removal of chronic foci anywhere in the body is imperative as a prevention of progressive ill health.

5. The arrest of infection does not mean that the joint condition will be cured, unless orthopaedic measures are employed.

6. General treatment, such as good hygiene, good food, tonics, is essential to success.

7. Acutely inflamed joints should be put in well padded plaster casts.

8. When acute symptoms subside, local treatment to the joint in the form of active and passive hyperemia, hydrotherapy, massage, active and passive exercises, should be administered regularly with great care and patience, and kept up for a long time.

9. Deformities should be prevented by steady the joints in the best positions during the acute stage.

State Medicine

L. B. McBrayer, M. D., Department Editor

Census Bureau's Summary of Bulletin on Mortality Statistics, 1919.

Washington, D. C., Nov. 15.—The Census Bureau's annual bulletin on mortality statistics for the death registration area in continental United States, which will be issued shortly, shows 1,096,436 deaths as having occurred in 1919. This represents a rate of 12.9 per 1,000 population, and is the lowest rate recorded in any year since the establishment of the registration area. The rate for 1919 is in striking contrast with the unusually high rate for 1918 due to the pandemic of influenza, which was 18 per 1,000. This is a drop of 5.1 per 1,000 population.

The death registration area in 1919 comprised 33 states, the District of Columbia and 18 registration cities in non-registration states, with a total estimated population of 85,147,892, or 81.1 per cent of the estimated population of the United States. The states of Delaware, Florida and Mississippi were added to the area in 1919 and Nebraska in 1920, so that now the only states not in the area are Alabama, Arizona, Arkansas, Georgia, Idaho, Iowa, Nevada, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, West Virginia and Wyoming. The Territory of Hawaii is part of the registration area, but the figures given in this summary relate only to the area in continental United States.

The following table shows, for the death registration area in continental United States in 1919, the total number of deaths and the death rate by certain leading causes, together with the percentage which each cause contributed to the total:

Cause of Death—	Rate Per Pct.		
	No. of Deaths.	100,000 Pop.	of Total.
*All causes -----	1,096,436	1,287.7	100.0
Organic diseases of the heart -----	111,579	131.0	10.2
Tuberculosis (all forms) -----	106,985	125.6	9.8
†Tuberculosis of the lungs -----	94,772	111.3	8.6
Tuberculosis meningitis -----	5,175	6.1	0.5
Other forms of tuberculosis -----	7,038	8.3	0.6
Pneumonia (all forms) -----	105,213	123.6	9.6
Influenza -----	84,113	98.8	7.7
Acute nephritis and Bright's disease--	75,005	88.1	6.8
Cancer and other malignant tumors--	68,551	80.5	6.3
External causes (suicide excepted)-----	67,634	79.5	6.2
Cerebral hemorrhage and softening-----	66,918	78.6	6.1
Congenital debility and malformations	56,714	66.6	5.2
Diarrhea and enteritis (under two years) -----	37,635	44.2	3.4
Diabetes -----	12,683	14.9	1.2
Diphtheria and croup	12,551	14.7	1.1
Bronchitis -----	10,913	12.8	1.0
Appendicitis and typhlitis -----	10,029	11.8	0.9

Suicide -----	9,732	11.4	0.9
Puerperal affections, other than puerperal septicemia----	9,538	11.2	0.9
Respiratory diseases, other than pneumonia and bronchitis	8,865	10.4	0.8
Hernia and intestinal obstruction -----	8,853	10.4	0.8
Typhoid fever -----	7,860	9.2	0.7
Cirrhosis of the liver	6,704	7.9	0.6
Meningitis -----	5,508	6.5	0.5
Puerperal septicemia	4,950	5.8	0.5
Whooping cough----	4,714	5.5	0.4
Rheumatism -----	3,907	4.6	0.4
Measles -----	3,296	3.9	0.3
Malaria -----	3,275	3.8	0.3
Scarlet fever-----	2,383	2.8	0.2
Erysipelas -----	2,186	2.6	0.2
Smallpox -----	358	0.4	\$.3
All other defined causes -----	172,161	202.2	15.7
Unknown and ill-defined causes ---	15,603	18.3	1.4

*Exclusive of still births.

†Includes acute miliary tuberculosis.

§Less than one-tenth of one per cent.

X-Ray and Laboratory

Robert H. Lafferty, M. D., Dept. Editor.

Drs. Braasch and Olson, of the Mayo Clinic, have an article in the Journal of Surgery, Gynecology and Obstetrics, Vol XXVIII, No. 6, on the Roentgenographic Diagnosis in Renal Tuberculosis, in which they discuss miliary renal tuberculosis, infarction and tubercular nephritis. Tubercular nephritis is the only one of these conditions which is of especial interest to the roentgenologist, and may involve the entire organ or only small areas. They find that in inflammatory dilatation of the pelvis as a result of tuberculosis in its early stages is largely confined to the calyces and this is differentiated from dilatation from other causes by the great irregularity in outline of the calyces and by the variability of degree of dilatation among the different calyces. They also find that there is often a marked dilatation at the uretero-pelvic juncture. When the process is advanced there may be necrotic areas found and these are sometimes confined to one or two calyces.

They draw the following conclusions: izing this district and planning future work.

1. The value of this method of diagnosis of renal tuberculosis does not appear to be fully appreciated.

2. Routine roentgenography in every case in which there is evidence of infection in the urinary tract is advisable.

3. Shadows may be found in 20 per cent of patients with renal tuberculosis. Such shadows may require the aid of cystoscopic data in their interpretation.

4. Positive evidence of tuberculosis may be obtained by this method when all other clinical data fail, and when cystoscopic examination is impossible.

5. Shadows due to tuberculosis may be arranged into three definite groups.

6. Caseated areas in the ureter and prostate may also be outlined.

7. Pyelography is occasionally valuable (1) in identification of renal infections of doubtful nature, and (2) in the identification of doubtful shadows in the renal area.

8. The cystogram may also give data of value.

Nurses Corner

Edith M. Redwine, R. N., Dept. Editor

District News of the North Carolina State Nurses' Association.

The Greensboro District entertained the nurses of the Winston District Wednesday afternoon, Dec. 3.

An interesting program was rendered followed by a social hour, at which delicious refreshments were served.

About seventy-five graduate nurses attended this meeting.

The Eighth District was organized at Wilson Monday afternoon, Nov. 15, with twenty-one charter members.

Four counties were represented out of the five composing the district.

Miss Newman, public health nurse of Wilson county, was elected president, with Miss Annie Morris, superintendent of Moore-Herring Hospital, Wilson, secretary, and Miss Caroline Moncure, superintendent Roanoke Rapids Hospital, treasurer.

The nurses were very enthusiastic and are expecting to accomplish much good in the future as an organized body in nursing service.

On Nov. 30th the Fayetteville District met in the First Baptist Church of Fayetteville for the purpose of reorgan-

In spite of the inclement weather, several counties were represented and an enthusiastic meeting resulted.

Officers for 1921 were elected. The next meeting will be in Sanford, March, 1921.

The Winston District entertained the Greensboro District Wednesday afternoon, Dec. 8th. About 100 nurses were present at this meeting.

The program was a most interesting and instructive one, the chief feature being an address by Miss Jane Van de Vrede, of Atlanta, superintendent of the Southern Division of the American Red Cross.

Miss Van de Vrede spoke of the discouragements that must at times come to all of us, but which does not last. Of the need for more and better nurses and the need of better conditions and more adequate equipment in hospitals and training schools if the chief aim of these these institutions, "Service to the Sick," is to be accomplished.

She asked that the graduate nurses not be a stumbling block in the way of young women who wish to enter the nursing profession but that they encourage them.

She urged closer co-operation between the people, doctors and nurses for plans to provide better nursing care for the sick.

"The nursing profession is hinged upon the medical profession" as it were and we cannot be an entirely separate institution since we have the same aim—to care for the sick.

A social hour followed Miss Van de Vrede's address and a delightful supper was served.

Publications Received

Practical Preventive Medicine.

Practical Preventive Medicine. By Mark F. Boyd, M. D., C. P. H., Professor of Bacteriology and Preventive Medicine Department of the University of Texas. Octavo volume of 352 pages with 135 illustrations. Philadelphia and London: W. B. Saunders Company, 1920. Cloth, \$4.00 net.

In this comparatively brief but concise presentation of a tremendously big

subject the author has emphasized the salient points that concern the general practitioner in his duty of aiding people to keep well, as much as his duty of seeking to recover health already lost. To those who seek more detailed discussions of the various phases of this subject the author has carefully cited references to such literature. The sections cover such headings as Epidemiology (23 chapters), Deficiency Diseases, Occupational Diseases, Special Aspects of Hygiene and Sanitation, Demography, Public Health, etc.

dent, Bayboro, N. C.; Dr. J. J. Purdy, secretary and treasurer, Oriental, N. C.

J. J. PURDY, Secty.

Wilson County.

The Wilson County Medical Society met at the Country Club, the chief features being an address on kidney disease by Dr. William D. B. McNider, of Chapel Hill and election of officers of the organization for the coming year. The meeting was in luncheon form, and nearly twenty members present greatly enjoyed the tempting repast served them.

Dr. B. H. Hackney, of Lucama, the retiring president presided at the meeting. In the election of officers Dr. G. M. Brooks, of Elm City, was named president; Dr. C. A. Woodard of Wilson, vice-president, and Dr. E. L. Strickland was re-elected secretary-treasurer.

Dr. K. C. Moore was elected a delegate to the State medical convention next year and Dr. L. J. Smith was named alternate. Dr. Moore was also elected a new member of the county medical council.

The address of Dr. McNider was heard with great interest and evoked general round table discussion among the doctors.

MECKLENBURG COUNTY.

The annual election of officers of the society was held Dec. 7, as follows: Dr. J. P. Munroe, president; Dr. R. L. Lineback, vice-president; Dr. J. Lester Ranson, secretary-treasurer.

The subject of the scientific program for the evening was a symposium on syphilis. Those having papers were Dr. Fred Austin, Dr. J. M. Northington, Dr. Heath Nesbit.

Drs. Alonzo Myers and Oren Moore attended the annual convention of S. A. L. surgeons, Dec. 1-2.

Dr. W. A. McPhaul has succeeded Dr. Warren as health officer for city of Charlotte, N. C.

Dr. John R. Ashe and Miss Medlock, both of Charlotte, were married November 24, after which they left by automobile for Tampa, Fla., expecting to go from there by airplane to Havana.

Dr. R. M. Gallant and Miss Evelyn Lynch, both of Charlotte, were married Dec. 8. The bride was formerly from Rutherfordton, but graduated from the Presbyterian Hospital Training School, class 1920. They are making a wedding trip to Florida and probably to Cuba.

Basal Metabolic Rate Determinations.

Laboratory Manual of the Technic of Basal Metabolic Rate Determination, by Walter M. Boothby, M. D. and Irene Sandiford, Ph. D. Section on Clinical Metabolism. The Mayo Clinic, Rochester, Minnesota and The Mayo Foundation, University of Minnesota. Octavo volume of 117 pages with 11 Tables and Charts of Explanation. Philadelphia and London: W. B. Saunders Company, 1920. Cloth, \$5.00 net.

Among the most recent of the new methods of precision in Diagnosis is the determination of the basal metabolic rate and this manual has been prepared with the idea of rendering this valuable diagnostic method available to any modern and well equipped laboratory.

Any new technique is liable to fall into disrepute because of a failure to fully grasp details requisite for arriving at a proper conclusion.

This work begins with a general discussion of the subject in its relation to physiology and pathology and follows with a discussion of technique, solutions, calculations, etc.

News Items

Pamlico County

The Pamlico County Medical Society held its annual meeting November 9 in Stonewall, N. C. We took in one new member, Dr. E. B. Woodard, of Bayboro, N. C. There are six physicians in the county, all members of County Society. The following officers were elected: Dr. D. A. Dees, president, Bayboro, N. C.; Dr. E. B. Woodard, vice-presi-

Guilford County

On November 4, 1920, the Guilford County Medical Society passed the following resolutions, a copy to be sent to the secretary of each County Medical Society and to the secretary of the State Board of Health:

1. We heartily endorse the educational campaign which has been instituted by the North Carolina Board of Health and which has been successfully conducted by them for a number of years. We believe that this campaign of education as instituted by the State Board of Health has done much to stamp out infectious diseases and has prevented the spread of communicable diseases. The education of the people along health lines has saved a great number of lives.

2. We do not believe that the State Board of Health should institute a treatment campaign for any disease or condition. The physicians of North Carolina, who are licensed to practice by the constituted Board of Examiners, are fully qualified and in number sufficient to take care of the indigent sick and none will suffer for want of medical attendance.

3. The campaign instituted by the State Board of Health for the removal of tonsils and adenoids has been unnecessary, expensive and reflects upon the willingness of the physicians of the State to take care of these cases. In the main, the cases that have been operated on have been at places unsuited for operations on the throat or any other surgical procedure. Operations conducted in school houses or places that have not been especially constructed for this and in the presence of a great number, where the patient could not have the best advantages, are conducive to bad results, and owing to the congestion incident to these clinics, in many instances, are dangerous to life. In Guilford County the men doing special work along this line have always been anxious and willing to give to any poor person, who may need their service, every consideration and their best efforts free of all charges, but these men are not willing to operate on cases that are able to pay without compensation and indeed we believe that the local men are more familiar with the financial con-

ditions existing in this community than the State Board of Health.

4. We believe that every operative case should be studied and a complete examination made and a careful history taken, then treated when the operator is not forced to tax himself or his assistants, avoiding excitement, rush and a wholesale way of doing things.

5. The treatment of diseases as instituted by the State Board of Health is looking toward socialistic medicine animated by a socialistic spirit and is a step toward State paternalism, to which we emphatically object.

6. A committee is appointed to confer with the State Board of Health and with the Legislative Committee of the North Carolina State Medical Society in anticipation of the proposed medical section of the Workmen's Compensation Act.

U. S. Public Health Service Hospitals and Tuberculosis.

Washington, D. C.—Several of the largest general hospitals of the U. S. Public Health Service are being provided with special facilities for the diagnosis of tuberculosis and for the study of patients to determine which Public Health Service hospital is best suited to their needs. These hospitals will become clearing houses for the diagnosis and placement of tuberculosis patients in their vicinity, especially for those with doubtful diagnosis or with complications requiring expert care. At each of them physicians skilled in this specialty will be on duty and the most modern methods will be in use. All Public Health Service hospitals, however, are open to tuberculosis cases; and admission is never denied because of lack of special facilities.

Special centers are already functioning in the Public Health Service Hospitals at Fort McHenry, Baltimore, Md.; Fox Hills, Staten Island, New York, and Hospital 35, St. Louis, Mo. Other centers will be organized as soon as possible.

Patience is not only a virtue, but it pays.

If you are afraid to pass the lessons you have learned on to others, you're not a very big man.

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Quotations from Doctors: No. 8

"Recently I was called to see a pneumonia case and found the man in a very bad condition---disease allowed to run several days without medical assistance. Examination revealed complete consolidation of the lower lobe of right lung; severe dyspnea, temperature 104, F., high pulse ---cyanosis.

"I left some medicine from my pocket case---ordered a large can of



no wrapper on can--only my own directions. It was correctly applied--patient's son reported next day father much better. Following morning found patient greatly improved--he was restful--free from pain; cyanosis gone, temperature lowered. Patient said; 'I don't know what the application was, but I am certain it saved my life.'"

R. C., M. D.,
CHICAGO, ILL.

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The Tri-State Medical Association of the Carolinas and Virginia will assemble in its twenty-third annual session in Spartanburg, South Carolina, on February 16-17, 1921. The Hotel Cleveland will be headquarters, and the auditorium of the hotel is ample to care for the large gathering that is expected. Dr. J. K. Hall, of Richmond, Va., the secretary-treasurer of the Association, reports that the program is already more than half completed, that the papers will be of wide scope, and of unusual excellence and that the attendance promises to be larger than it has been for years.

The secretary-treasurer, and the president, Dr. J. P. Munroe, Charlotte, North Carolina, have begun an active campaign looking to an increase of one thousand in the membership of the Association. Physicians who hold membership in the State societies of South Carolina, North Carolina and Virginia are eligible for fellowship in the Tri-State Association. Applications for fellowship should be directed to Dr. J. P. Munroe, Charlotte, North Carolina, the president of the Association, or to Dr. J. K. Hall, Richmond, Virginia, the secretary-treasurer.

Dr. Hall has just returned from a visit to Spartanburg in the interest of the Association. He reports that the local medical society and the Chamber of Commerce will both extend a warm welcome to visiting physicians. A few guests of international reputation will address the Association. A number of reservations have already been made at the Hotel Cleveland, and it is suggested that physicians who expect to attend the meeting make provisions at once for hotel accommodations. Dr. Baxter Haynes, of Spartanburg, is chairman of the local committee of entertainment.

of the institution. The anniversary occurred in 1918, but because of war conditions existing at that time, with over 3,000 of the undergraduates and alumni of the University having answered the call to arms, the celebration was postponed until conditions were more nearly normal. More than fifty per cent of the faculty and forty-three per cent of the alumni of the Medical Department of the University held commissions in the Army and Navy at the time the actual centennial date fell.

St. Louis University holds the distinction of having established in the great Louisiana purchase tract the first Colleges of Medicine, Dentistry, Law, and Commerce. Its College of Dentistry is the only one in Missouri of Class "A" rating, and together with the Medical College has so expanded that outside aid in the form of an endowment fund is imperative, in order to provide proper salaries for the teaching staff and proper facilities for the two departments. Of the \$3,000,000 asked, the income on \$1,500,000 is for salaries of the teaching staffs of the two colleges; the cost of a new laboratory for the school of medicine is estimated at \$250,000; new buildings and clinics for the Schools of Medicine and Dentistry will cost an additional \$500,000. The remainder of the \$3,000,000 will be applied to the needs of the Institute of Law, School of Commerce and Finance, and the College of Arts and Sciences.

It is hoped by the faculty that old graduates of the Medical and Dental Colleges of the University, who are now scattered all over the world, will appoint themselves a committee of one to aid their alma mater to realize the Centennial Fund.

The Woman's Foundation for Health.

St. Louis University, the oldest seat of learning west of the Mississippi River, has for the first time in its more than a century of endeavor made a public appeal for funds, the larger portion of which are to be applied to the support of the Colleges of Medicine and Dentistry. The University has asked its alumni and friends to raise the sum of \$3,000,000 as a Centennial Endowment Fund, in commemoration of the one hundredth anniversary of the founding

A year ago an international conference of women physicians met in New York City on invitation of the War Work Council of the National Board of the Y. W. C. A. This conference met for six weeks deliberation. A convention of women representing national women's organizations met with the conference for the last two weeks. As a result, a program of applied health education for the individual has been endorsed by the following organizations of women; grouped under the new

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name of The Women's Foundation for Health.

1. National association of Collegiate Alumnae.

2. National Conference of Deans of Women.

3. National Association of Medical Women.

4. National Civic Association.

5. National Council of Women.

6. National Council of Jewish Women.

7. National Congress of Mothers and Parent-Teachers' Association.

8. General Federation of Women's Clubs.

9. National League of Business and Professional Women.

10. National League of Women Workers.

11. National Women's Christian Temperance Union.

12. National Women's Trade Union League.

13. National League of Women Voters.

14. National Young Women's Christian Association.

The purpose of The Women's Foundation for Health is to promote health among women. This health program is the outcome of a growing demand among women for health and they are about to assume a new code of honor in accepting health as a personal responsibility. We, as physicians, have traveled far from our vision of curative medicine, into the field of corrective work, through the surgeon, dentist, etc., into preventive medicine, with the epidemiologist, the school nurse, etc., and a segment of the field is now being occupied by the promoter of positive health. Some of the principles of the Women's Foundation for Health are:

1. Health is a condition of being which allows an individual the full development and mastery of the powers of her physical body, her mental processes, her emotional force and her spiritual expression.

2. It regards the attainment of health as a matter of personal responsibility.

3. Health responds to habits of living. Good habits are constructive.

4. An important function of every doctor is to teach people what good health habits are.

5. The community has a responsibility to promote health through a Health Center, the purpose of which is to make the following accessible to all women.

a. An individual health examination.

b. Health instructions with individual application.

c. Recreational opportunities.

The new type of health education has been successfully demonstrated by the Bureau of Social Education of the National Board of the Y. W. C. A. at 43 East 22nd St., New York City, where hundreds of physicians and physical directors have come to observe the work. It is now continued under the Women's Foundation for Health. A "Health Week" has been conducted under the Y. W. C. A. in Charlotte, November 15 to 20.

1. Individual health examinations were made.

2. Instruction was given on good health habits.

3. Local members of some of the national association (see above) were made conscious of being a part of a big movement to promote health among women.

An international organization of men are planning a Health Week for a health examination of all members.

Are physicians ready for the Health Education Center, which is coming?

When one of our patients comes and requests health examination, will we say, with a laugh, "You don't need any," or will we be forward in the procession as the wheel of progress chases the old enemies of women's health: headache tablets, laxative habit, "I'm so tired." "I don't feel well," "I can't, its my sick time," "My feet are just killing me."

What Are Vitamines?—Best Described by What They Do.

U. S. Department of Agriculture,
Division of Publications,
Press Service.

"What are vitamines?"

This is a question asked repeatedly since the importance of these compounds in foods has come into prominence, but no definite answer has yet been given. Investigations by scientists at universities, agricultural experiment stations, and institutions for medical research have revealed much information regarding the function of vitamines in

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body maintenance and building, and the parts of the various foods in which they are to be found.

That vitamins are compounds absolutely essential in the food, in order to maintain the weight of the body and produce growth, has been definitely proved. The lack of vitamins causes deficiency diseases, so named because they are due to lack of something in the diet. Vitamins are present and are needed in such small quantities in the food that chemists have not yet been able to isolate them from the many other compounds which are in foods. For this reason, we know very little of the actual character of vitamins.

Three Types of Vitamins.

According to a statement by Dr. Carl O. Johns, in charge of nutrition work in the Bureau of Chemistry, U. S. Department of Agriculture, vitamins have been classified into three different types depending upon the functions which they have in promoting well-being and growth.

The first type is known as water-soluble vitamins, and these are necessary in order to obtain growth from food. Lack of these causes beri-beri, which manifests itself by disease of the nervous system and by other symptoms. These vitamins are found in seeds, in green plants, in certain bulbs and fleshy roots and fruits, and in milk and eggs, as well as in certain organs in the animal body. The seeds referred to include beans, nuts and the various cereal grains. When cereals are very highly milled in order to obtain a very fine white flour, a large part of the vitamins may be removed. Vitamins are also lost when rice is polished in order to remove the outer layers which contain most of the vitamins. It is for this reason that a diet consisting mainly of polished rice may cause beri-beri, while unpolished rice does not cause this disease.

Fat-Soluble Vitamins.

The second type is known as fat-soluble vitamins, and these are found in butter, eggs, milk, and in certain animal organs such as the heart, kidneys, and liver, and to some extent in other fats as well as in green vegetables. They also exist in smaller quantities in certain seeds. When fat-soluble vitamins are absent from the diet animals and man are subject to a disease of the

eyes, which appears to be related to xerophthalmia and which, if prolonged, may produce blindness.

The third type is known as antiscorbutic vitamins—that is, those which prevent scurvy, which manifests itself by disease of the bones as well as in other ways. These vitamins are found in oranges, grapefruit, lemons and other citrus fruits, and in green vegetables such as tomatoes, spinach, and lettuce, and in eggs and raw milk. The drying of vegetables frequently destroys the activity of the antiscorbutic vitamins. The best source of vitamins is in the leafy parts of vegetables, and this is one of the reasons why spinach, lettuce, and cabbage are valuable foods.

Careers for Medical Men.

The higher educational qualifications now required of medical students and the greatly improved methods of instruction have resulted in multiplying the careers, aside from regular practice, which are now open for graduates of medicine. At the present time, for example, the graduate may enter the medical service of the Army, the Navy or the Public Health, Canal Zone or Indian services; he may find a special opportunity in industrial medicine; in insurance; as a school physician; in public health work; on hygiene boards; in administrative work in general hospitals, or as a medical attendant in an institution for the insane, the crippled or the feeble-minded. There is also an increasing demand for medical missionaries and for medical teachers abroad. There is a growing demand for medical teachers and unusual opportunities in medical research. There is an increasing number of research institutes, providing special advantages with fair incomes for physicians especially qualified for investigative work. So many, indeed, are the opportunities for the well educated physician, aside from regular practice, as to more than justify the present reasonably high standards of preliminary and medical education. The great increase in the number of careers open to medical men are not only benefiting larger numbers of well trained graduates in medicine, but also, through their activity and influence, insuring a better understanding in the future of problems relating to public health and the prevention and cure of disease.—*Jour. A. M. A.*, Aug. 7, 1920.

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PELIDISI.

In Vienna where exact medical science is highly developed and where, before the war, medical students of all nationalities flocked to sit at the feet of the great masters who put the finishing touches to medical education, a new system of measuring the under-nourishment of children with scientific accuracy has been developed.

Professor Clemens von Pirquet, head of the Department of the Diseases of Children in the University of Vienna, who developed the plan, has christened it the Pelidisi system. It is based upon the relation of the length of the body in a sitting position to its weight.

Regarding the ratio in the normal adult as 100, the average Pelidisi of the normally well-nourished child is 94; the lowest plane classified is 76, and this figure indicates under-nourishment closely approximating actual starvation.

Children classified under 90 require prompt relief, if the diseases of sub-nutrition are to be avoided. The American Relief Administration, European Children's Fund, which has been conducting child feeding operations on a large scale in Vienna, has been giving a free meal daily to practically all children up to and including class Pelidisi 93, but in other Austrian provinces the feeding has been confined chiefly to children of a Pelidisi up to 91 only, because in the provinces investigations are necessarily slower and control more difficult.

How serious the under-nourishment is in Austria may be gathered from the fact that examination of 50,324 children, between six and fourteen years showed 30,817, or more than three-fifths, had a Pelidisi of 93 or lower. In fact, of these only 6,382 even attained to the 93 class.

Seven thousand eight hundred and ninety-five showed a Pelidisi below 89. There were 4,629 only with a Pelidisi of 90; 5,677 with a Pelidisi of 91; 6,530 with a Pelidisi of 92. These were in the Austrian provinces of Salzburg and Upper Austria where the American Relief Administration was furnishing supplementary meals to 22,000 daily, that is to say, to all children including a Pelidisi of about 91½. In the city of Salzburg, at the time the examinations were made, it was found that the administration was feeding children to include the

class of Pelidisi 90, and only 110 of the 675 children examined fell into the Pelidisi classification 91.

Herbert Hoover, the chairman of the American Relief Administration, European Children's Fund, hopes to continue the feeding of Austrian children to the number of 300,000 during the present winter. The complete program for child feeding in Europe of the fund calls for the feeding of approximately 2,500,000 children, not including Germany, where the American Quakers believe that 1,000,000 must have assistance from America this winter if they are to survive.

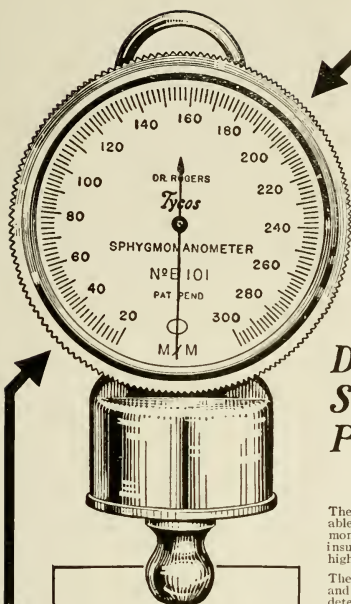
Believing that Americans never have, and never will, fight women and children, the American Relief Administration is assisting the Quakers in this work, and will raise 50 cents for every dollar found.

The cost of this feeding is figured at \$3.00 per child per month, but with the co-operation of their own governments and of the charitable organizations in the countries where it is carried on, two-thirds of that expense is met by the countries directly benefited, in the form of rent, cartage, internal transportation, labor, etc., so that the cost to American charity is reduced to about \$1.00 per month per child.

So carefully has the work been organized that the overhead has been brought down to less than one-half of one per cent, a degree of efficiency rarely equalled in the annals of relief work. Even this overhead, however, does not come out of charitable contributions but is met from credit balances from the sale of food drafts in America. Therefore every dollar contributed for the children's fund puts one dollar worth of food into a child.

Recruiting Nurses.

Washington, D. C.—Owing to the impending lack of trained nurses to staff the new hospitals that are being opened by the U. S. Public Health Service the superintendent of nurses will make an effort during her pending tour of inspection to obtain recruits to fill the vacancies. Public Health Service hospitals exist in all parts of the country and offer opportunities for patriotic service in the care of disabled soldiers of the great war.



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The physician's Responsibility: An Important Decision on Professional Secrecy.

The recent decision of the Supreme Court of Nebraska, abstracted in the Medical department of The Journal last week, is of importance and interest to practicing physicians, and especially to health officers. It establishes for the first time, by the decision of a court of last resort, the exact relations that exist between a physician and his patients, on the one hand, and a physician and the public, on the other. The details of the case, as shown by the evidence, are interesting and unusual. The plaintiff, while stopping at a small hotel, consulted a local physician, the defendant, regarding some sores that had appeared on his body. After an examination, the physician told the plaintiff—his patient—that he believed the disease to be syphilis, but that it was impossible to make a positive diagnosis without a Wassermann test, for which he had no equipment. The defendant physician was also the physician of the hotel, and the family medical adviser of the owner. He told the plaintiff that there was danger of communicating the disease to others in the hotel and asked him to leave the hotel the next day, which the plaintiff promised to do. On the following day, the physician, while making a professional call on the manager of the hotel, who was ill, learned that the plaintiff was still there. He thereupon warned the manager's wife that he thought the plaintiff was afflicted with a contagious disease, and advised her to use special precautions to avoid infection. As a result of this warning, the plaintiff was forced to leave the hotel. He consulted a physician in another town, who, after a negative Wassermann test had been made, was unable to say whether the plaintiff had syphilis or not. The plaintiff, thereupon, brought suit against the physician, claiming damages on the ground that he had been injured by a disclosure of a confidential communication, which disclosure constituted a breach of professional confidence on the part of the physician. There was no dispute regarding the facts; the question before the Supreme Court was whether the statement of the defendant physician that the plaintiff was suffering from a contagious disease constituted proper ground for damages.

The court pointed out that, under the common law, no privilege exists between physicians and patients, and that this ruling prevails except when changed by statute. This means, in everyday language, that, contrary to the opinion generally held by both physicians and the public, communications made to physicians are not under the obligation of secrecy but have the same legal status as communications made to any one else, unless the state legislature has passed a special law on this subject. In Nebraska there is no special law making communications to physician privileged. The legislature in 1913 passed a law providing that a physician should not be allowed to disclose on the witness stand any confidential communication made to him in his professional capacity. The object of this statute is obvious. It is to prevent confidential communications being used as evidence against the person making them or, in other words, to protect an individual from being forced to testify against himself. But in the present case the physician was not on the witness stand, so that this statute did not apply. Another statute—the medical practice act—in defining unprofessional and dishonorable conduct for which a physician's license may be revoked, includes among the acts of such conduct "betrayal of a professional secret to the detriment of a patient." Is such a communication as the defendant made in this case "unprofessional and dishonorable conduct?" After an exhaustive discussion, the court decides that it is not.

This is the first time that such a question has come before any American court of final appeal; hence the language of the court is important and worthy of repetition. The court says that information given to a physician by his patient, though confidential, is subject to the understanding that if the patient's disease is found to be of so highly contagious or infectious a nature that it may be transmitted to others unless the dangers of transmission are disclosed, then the physician is warranted in making so much of a disclosure to such persons as is reasonable and necessary to prevent the spread of the disease. Putting this ruling in ordinary language, it means that the court recognizes the fact that while a physician owes a duty to a patient to respect his privacy, he owes a duty to the public to



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protect it against infectious disease, and that of these two duties the duty to the public is the greater. Yet the court recognizes that this duty to the public must be properly safeguarded. It furthermore says that when a physician makes a disclosure, he must be sure that it is necessary to prevent the spread of the disease, and must act in good faith with reasonable grounds for his disclosures and without personal malice toward the infected person. Having observed these precautions, he cannot be held liable, even though he is mistaken in his diagnosis and has stated that his patient is afflicted with a disease that he does not have. In other words, the question at issue is not the accuracy of the physician's diagnosis. The law does not require the physician to be infallible; he is only required to possess the average skill and ability of other physicians in similar circumstances and to exercise due care and skill. After having made a diagnosis to the best of his ability, if he believes honestly and without malice that the patient is a danger to another individual or to the community, he is justified in communicating so much of his belief as may be necessary to protect others from contracting the disease. The decision recognizes the fact that while a physician owes a duty to his patient, he also owes a duty to his other patients and to the public.—*Jour. A. M. A.*, Oct. 30, 1920.

Chronic Nephritis.

L. A. Turley, El Reno, Okla. (*Journal A. M. A.*, Oct. 9, 1920), says that if one would attempt to describe the history of the process leading to the condition commonly known as chronic interstitial nephritis, it would be somewhat as follows: Whenever the kidney is the site of an acute nephritis of any severity, there are some of the functional units that do not regenerate but degenerate and atrophy, and the connective tissue in the immediate neighborhood undergoes hypertrophy and contracts into the loose cicatricial form. Later, following another attack of acute nephritis, more tubules undergo the same process. This process continues until a considerable part of the kidney is involved. As soon as the reduction in the number of tubules becomes considerable, the remaining tubules undergo compensatory hypertrophy. In later years some of these

hyperplastic tubules and some of the more normal tubules become plugged with casts or by some other means, and the epithelium undergoes an atrophy from the center outward. Thus we have the picture seen in the sections of the small red, granular kidney, namely, areas of increased connective tissue in which are to be found the epithelial representing former tubules, and the whorls of connective tissue representing former glomeruli; hyperplastic tubules with fairly normal epithelium; hyperplastic tubules with atrophied epithelium and filled with casts or other material and between which there is little if any more connective tissue than in the normal kidney, and tubules in all stages between these and the cords mentioned above. Therefore, since we find that the connective tissue increase follows and does not precede the reduction of the parenchyma, and that the increase of connective tissue depends on a form of parenchymal reduction that results in the diminution of the size of the tubules; and since we find areas in otherwise normal kidneys in which there is such reduction in the size of the tubules followed by connective tissue increase in the immediate environment, we are forced to the conclusion that there is no such condition as chronic interstitial nephritis, and that the condition now known by that name is the end-result of a process that begins in early life and is added to as the years go on, a process characterized by the degeneration and atrophy of some of the functional units following each attack of acute nephritis, and which results in later life in a very much reduced functional parenchyma, and an increase in the interstitial connective tissue. In giving this condition a name, if we would conform here to the custom of naming like conditions in other parts of the body, we would call it senile nephritis.

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in the early convalescence, under direction of the surgeon, lest fracture occur or the graft become dislodged. Likewise in cases of tendon transplantation, there must be a slow and painstaking re-education of the brain cells, whereby the tendon may learn to perform an entirely new function. Adequate post-operative care in these cases of surgical reconstruction is quite as essential to successful results as skilful surgical technic. Many a practitioner has suffered severe criticism, not because of any failure to secure the reduction of a fracture and its maintenance in a proper position, but because he was too anxious to discharge his patient, or failed to follow and properly direct the convalescent.

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The next annual meeting of the Tri-State Medical Association will be held in Spartanburg, S. C., Feb. 16-17, 1921.

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- 10th District—Dr. Eugene B. Glenn, Asheville.

Delegates.

To A. M. A.—Dr. John Q. Myers, Charlotte; Dr. E. S. Boice, Rocky Mount.
To Virginia Medical Society—Dr. Fred M. Haynes,

Winston-Salem; Dr. Kendrick, Elizabeth City; Dr. B. C. Nalle, Charlotte.

To South Carolina Medical Society—Dr. D. A. Stanton, High Point; Dr. W. A. Monroe, Sanford; Dr. W. R. McCain, Waxhaw.

Committees Elected.

Scientific Work—Dr. E. J. Wood, Wilmington; Dr. Richard N. Duffy, New Bern; Dr. C. A. Shore, Raleigh.

Publication—Dr. P. B. McCain, Sanatorium; Dr. C. A. Julian, Thomasville; Dr. W. L. Dunn, Asheville.

Obituaries—(Continued) Dr. Arch. Cheatham, Durham; Dr. E. G. Moore, Elm City; Dr. F. R. Harris, Henderson; Dr. N. D. Bitting, Durham; Dr. B. O. Edwards, Asheville.

Public Policy and Legislation—Dr. H. A. Royster, Raleigh; Dr. L. B. McBrayer, Sanatorium; Dr. Cyrus Thompson, Jacksonville.

Finance—Dr. J. W. Long, Greensboro; Dr. E. L. Bullock, Wilmington; Dr. Eugene B. Glenn, Asheville.

The next annual meeting of the North Carolina Medical Society will be held in Pinehurst, April, 1921.

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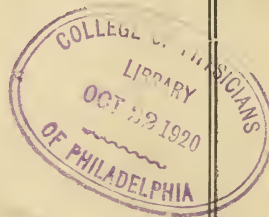
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Operative or accidental wounds heal rapidly under a Listerine dressing, as its action does not interfere with the natural reparative processes.

The freedom of Listerine from possibility of poisonous effect is a distinct advantage, and especially so when the preparation is prescribed for employment in the home.

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